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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

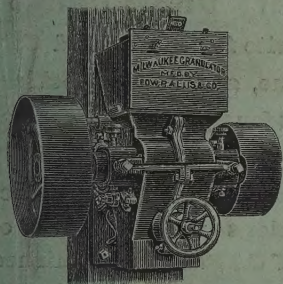
PUBLISHED BY
Mitchell Bros. Company.
(INCORPORATED.)

Vol. IV.

CHICAGO, ILLINOIS, MARCH 15, 1886.

No. 9.

SUBSCRIPTION PRICE,
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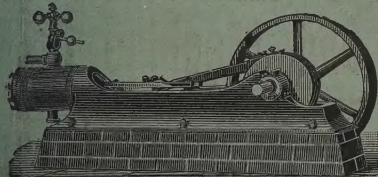
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Automatic Power Shovels.

We make them in sizes suitable for large or small Mills and Elevators, and they are equally as profitable for small as large.

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GENTLEMEN:—We have used a power shovel that we had of you about two years, to unload grain from cars. It does the work of three men easily, and by its use we are able to unload all our grain with our regular store crew. Since we put the shovel into our store we have saved the cost and repairs on it several times over. It has become an indispensable part of our machinery for handling grain.

Yours truly, S. W. THAXTER & CO.

"Would not entertain an idea of Running a Mill without it."

MESSRS. G. W. & C. A. LANE:

GENTLEMEN:—Your favor of 18th at hand and fully noted. In regard to our steam shovel, we think it saves the labor of at least two men, and we would not entertain the idea of running a mill without it. The one we are using gives us but very little trouble, if it has ordinary attention and is properly oiled.

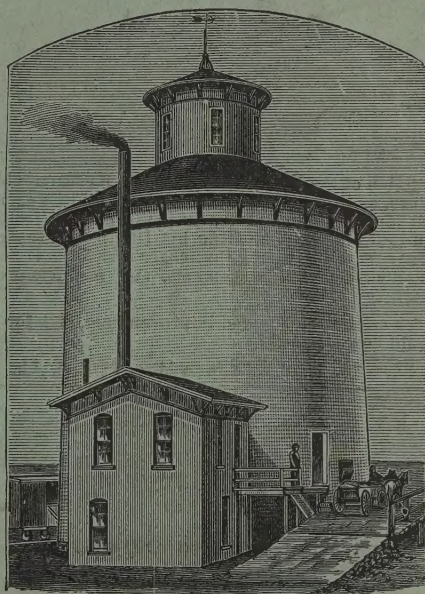
Yours truly,

GARLAND & LINCOLN.

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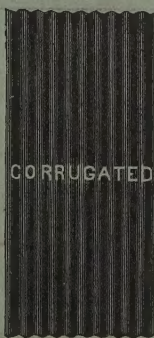
Circular Elevators

IN OPERATION

In the Northwest.

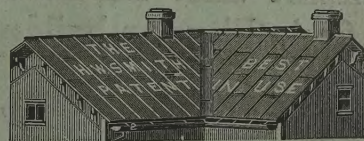
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READ THE FOLLOWING:

OFFICE OF G. B. SHAW & Co.,

CHEERYVALE, KAN., March 9, 1885.

DEAR SIR:—In answer to your recent favor will say, that with the three elevators we are now operating, built in accordance with plans furnished by you, we are well pleased, and would have no hesitation in recommending you as a skilled and economical designer of Elevators. With the machines and machinery bought of Barnard & Leas Mfg. Co. we are also well pleased, as it is all first-class and satisfactory in every way.

Very truly yours, G. B. SHAW & Co.

A. O. SHERMAN, Grain Dealer,

ROSSVILLE, KAN., March 5, 1885.

DEAR SIR:—I desire to say, that by following plans in building my Elevator at St. Marys, Kan., furnished me by you, and placing my order for machinery with Barnard & Leas Mfg. Co., of Moline, Ill., for Wheat Cleaner, Corn Sheller, and Cleaner and Elevator Goods entire, I now have one of the best Elevators in the state. Everything works splendid and to my entire satisfaction.

Respectfully, A. C. SHERMAN.

OFFICE OF TUDOR, ELLIOTT & Co., Grain and Chop-

ped Feed, HOLTON, KAN., March 21, 1885.

DEAR SIR:—We like the plan of our Elevator very much, and do not think that for a building of the size of ours the plans could be improved upon. Everything is simple and handy, and very easily run. The machinery works fine, and has ever since we started, and the Sheller is the best we have ever seen. The Corn and Wheat Cleaners could not do any better work than they do. We are fully satisfied and pleased with everything, and

should we conclude to erect another Elevator at some other point, will consult you for a plan.

Yours very truly, TUDOR, ELLIOTT & Co.

B. F. BLAKER & Co., Lumber, Building Material, Grain and Flax Seed,

PLEASANTON, KAN., March 5, 1885.

DEAR SIR:—The Elevators you designed for us at Fontana, Kan., and Sprague, Mo., are giving entire satisfaction, and the machinery all does its work well. We consider your plan very convenient, substantial and economical.

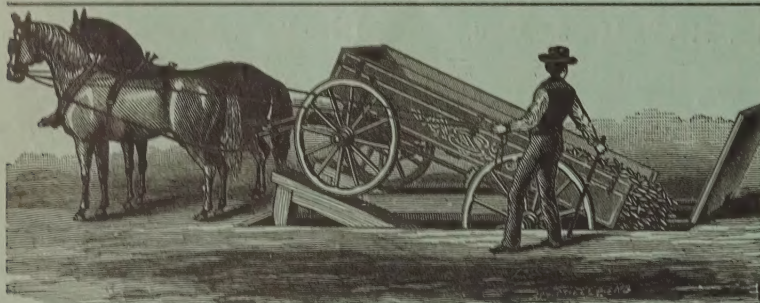
Yours very truly, B. F. BLAKER & Co.

BRINSON, HILL & Co., Grain Commission Merchants, OTTAWA, KAN., April 2, 1885.

DEAR SIR:—Replying to your favor of recent date, we take pleasure in saying, our new elevator built here last season, on your plans and specifications, gives us highest possible satisfaction; and the machinery furnished by Barnard & Leas Mfg. Co. is first-class in every respect, and works to our entire satisfaction. We have, up to this date handled about 150,000 bushels of ear corn, and a large amount of other grain through our elevator, and with your complete outfit of machinery, etc., and have not been to a nickel's expense or had one minute's delay from any cause whatever, all of which we credit to your well-arranged plans, and good class of machinery furnished by your house.

We can fully recommend and endorse your architecture and machinery, and you have liberty to refer to us, any time, any one contemplating building an elevator.

Very truly yours, BRINSON, HILL & CO.



The above cut is a fair representation of the Rail Dump in common use, on which we are collecting a royalty for past use, and licensing parties to continue to use, and also put in new Dumps. Our patents on Rail Dumps fully cover this class of Dumps. Any one using Rail Dumps can readily decide by comparing his Dump with this cut, whether he infringes or not. We also control patents that cover Platform Dumps. Our prices are reasonable in settlements for past infringements, and for licenses to continue to use the Dumps.

Applications for Licenses for using said patented improvements, and for settlements for past infringements should be addressed to

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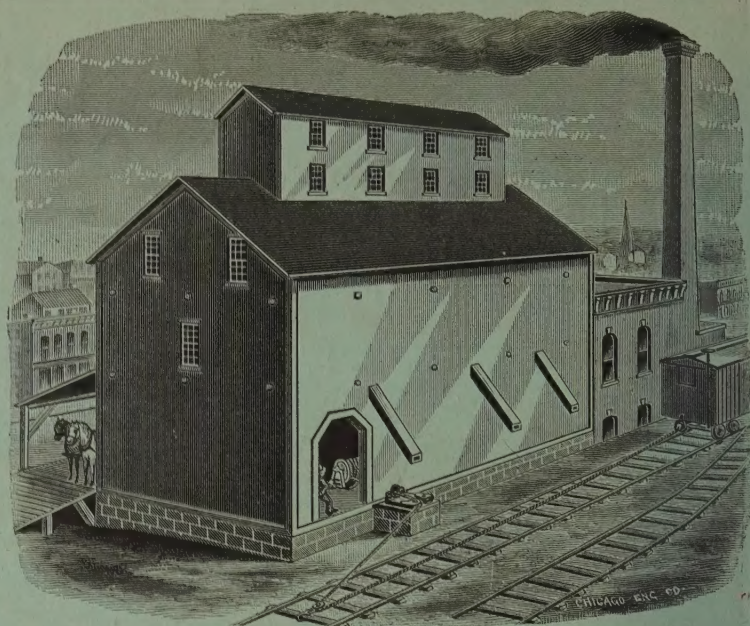
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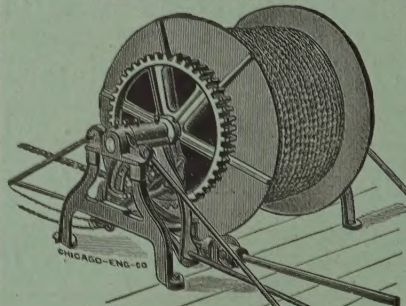
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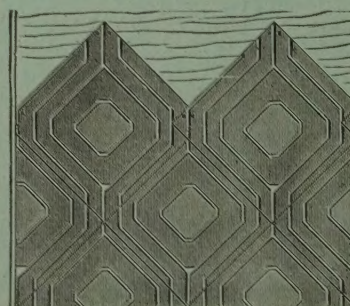
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THE ROUND GRAIN ELEVATOR.

An elevator that possesses the desirable qualities of convenience, economy in operating, cheapness in first cost, is something that every grain man is interested in. The accompanying illustrations show the construction of the circular grain elevator now being extensively used in the Northwest.

The lower part of the house is constructed in the form of a circular hopper divided up into sections or bins, and all leading to the center. The superstructure is also divided up to correspond with divisions below; each division forms a bin, and they vary in number according to size of elevator.

The center of the house, or pit, as commonly termed, is sunk down four feet below the bottom of this hopper (see next page), in which stands the elevators, so arranged that grain may be drawn from any one of the bins, or from the receiving hoppers to the elevators, and carried to the top of the building, where by a very complete distributor it can be discharged from either stand of elevators into any bin in the house or direct into shipping scales.

By referring to Figs. 1 and 3 the construction of the hopping can be seen. The working floor, or floor where the cleaner and shipping scales are set, is on a level with the top of this hopping. Where the receiving room, as shown in Figs. 1 and 2, is not used, the receiving scales are also on this floor in the open space adjoining the receiving room (see Fig. 2). The receiving room is only used in very low, marshy land, where pit is built up above ground to avoid water, and also have very low approach.

Above the working floor some of the bins are left out for a height of ten or twelve feet, as shown in Fig. 3, thus leaving space for cleaning machinery, etc. The balance of bins run to bottom of hopper near boot (see Fig. 1), thus using the entire house except such room as is desired for storage purposes. The bins could all be elevated in this manner if desired, leaving the working floor the full size of elevator.

The main sill into which the studding are mortised is made of consecutive layers of boards twelve inches wide, bent so as to form a circle, with the joints broken so that no two joints come together, thus making a hoop

twelve inches square in section and of the diameter of the base of the house.

The studding are mortised into this sill, then fastened in a similar manner at the top; then two thicknesses of boards are bent around on the inside of the studding, lapping joints, making it perfectly tight, and preventing any chance of leakage.

On the outside of the studding the siding is bent around and nailed securely to the studding, thus forming a band

When any given bin is full and the adjacent ones empty, the pieces in the bin that is full become ties, while those in the adjacent ones become braces, thus preventing the partition from spreading, the pressure being imparted each way from the full bin from one set of pieces to the set in the next bin until the pressure meets on the opposite side of the house, and the stress on one side is neutralized by that of the other. Every brace in the house is subjected to this action to a greater or less degree, as soon as any bin is filled, but owing to their great number there is no great strain on any one. There are now nearly one hundred of these elevators in operation in the Northwest, giving the best of satisfaction. Messrs. BARNETT & RECORD, of Minneapolis, Minn., are the exclusive owners of patents, and builders for all territory west of the Mississippi River. They will be pleased to furnish any information to interested parties.

HOW WHEAT GROWS.

Recent experiments made by Dr. Paley, an Englishman, and others, have destroyed a very popular though erroneous idea about the fertilization of wheat. Hitherto it has been generally believed that one plant of wheat is fertilized by another by means of the anthers protruding from the spikelets of the ears while the wheat is "in flower," the idea being that these wheat "blossoms" are fertilized by pollen floating in the air. Thus a poor yield of grain is often attributed to high winds prevailing during the "blooming" time, as they will blow off the anthers dangling from the ears,

and prevent the wheat, as it is supposed, from setting through the loss of the pollen. But the fact brought to light by the investigations alluded to is, these anthers, when protruding from the glumes, have already performed the office of impregnation, which takes place within the closed glumes, thus proving conclusively that each glume of a wheat ear is bi-sexual and self-fertilizing. The "blossoms" dangling from the ears are nothing but exhausted anthers, and of no further importance for the thriving of the grain.

The elevator men at Buffalo, N. Y., began issuing negotiable warehouse receipts last week.



THE ROUND GRAIN ELEVATOR.

eight inches wide, the space between the siding and lining forming an air space and allowing the air to circulate around the outside of bins. In the center of the house a circular space about fourteen feet in diameter is left running to the top and extending above the elevator forming the cupola, through which runs the stairs and elevators (see Fig. 1). The partition around this circular space forms the inside of the bins. The partitions forming the lateral sides of the bins are radial to the center of the house and are braced and tied every three feet lengthwise, and every eighteen inches high, by one by six securely fastened to each partition. Throughout the entire building the tensile strength of the timber is obtained.

BUILDING ELEVATORS.

The leading ambition of all grain dealers, those who are not already fixed, is to have an elevator. Very few know just what they want for an elevator, and consequently have to trust to some one to instruct, plan and arrange for them. In that respect they are in precisely the same fix as the man, or set of men, who may be figuring on building a flour mill. They can not, as a rule, do it themselves, but must find a mechanic with the necessary skill and ability to do it for them. The mill men of this country are rapidly learning that every man who lays claim to skill in that direction can not be fully trusted. Many guileless millers have been expensively sold by trusting to incompetent men of large pretensions. While the building of a small elevator is not of so much importance as the building of a flour mill, still a badly arranged elevator is just as troublesome and annoying as a badly arranged flour mill. In view of that fact every grain man who contemplates building an elevator should be extremely careful who he employs to plan and arrange for him. The arrangements of an elevator should be simple. There should be no surplus or unnecessary machinery of any kind; and above all there should not

range of that kind requires no extra labor to run an elevator. The man who attends to the dumps can attend to all. A combined sheller and cleaner should never be used in an elevator; they are a positive nuisance. Such machines do well enough for grist mill purposes where but little corn is needed, but are altogether out of place in an elevator where it is required to shell corn at the rate of a hundred bushels an hour and upwards. Few elevators are complete without a small, or loose, grain separator. It is more convenient to locate them on the first floor where they can be fed from a bin, they do the work better, and as they require more attention than a corn cleaner, they can be reached easier by the operator. In a wheat growing section no elevator should be without a good separator, in fact they cannot do well without one.—*R. James Abernathy, in Southwestern Miller.*

STAMPING WASTER TIN PLATES.

[From the London Ironmonger, Feb. 13, 1886.]

It will be very interesting to note whether or not the tin plate manufacturers of South Wales will largely follow the example of W. Gilbertson & Co., in declining to stamp waster tin plates. This company now stamp their "Old Method" plates after the tinning process has been

DEFICIENCY IN WHEAT YIELDS.

To anybody giving his attention to the yield of wheat crops in this country, it must be a matter of surprise that so comparatively small returns should be obtained from the amount of seed sown, the average yield being no more than from 12 to 15 bushels, and 40 bushels to the acre being quite an exceptional yield. Relative to this subject, a late number of the *Contemporary Review* publishes an article written by Dr. Paley, from which we gather these interesting facts:

A single grain of wheat will produce from five to seven ear-bearing stalks, each ear containing, on fairly good land, from 50 to 60, and sometimes even 70 grains. Three or four of the terminal grains are generally defective, and are rejected in winnowing and screening the wheat. Yet on a moderate estimate, one grain can multiply from 300 to 400 fold, or, in other words, one bushel sown can produce (theoretically, at least) from 300 to 400 bushels, while the average yield is about twenty times less. There are a great number of influences that bring about the large discrepancy between the possible and actual yield. In the first place, only part of the seed germinates; much of it is destroyed by birds, mice, and insects, and considerable quantities are wasted during

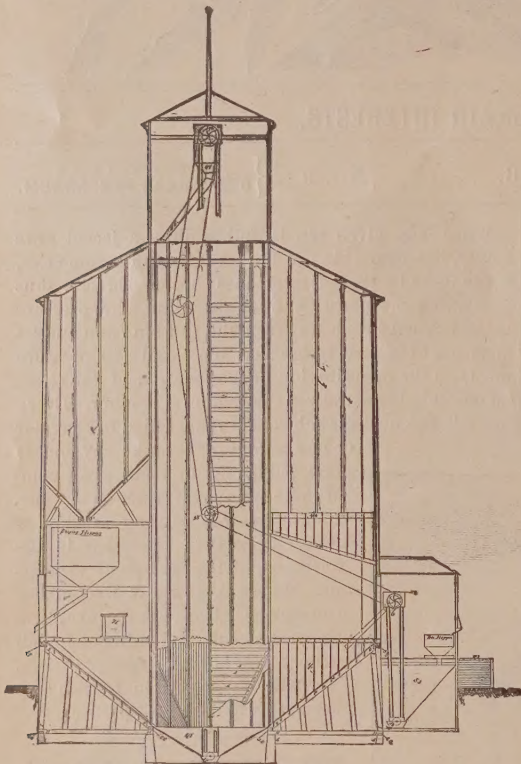


FIG. 1.—TRANSVERSE SECTION OF ROUND ELEVATOR.

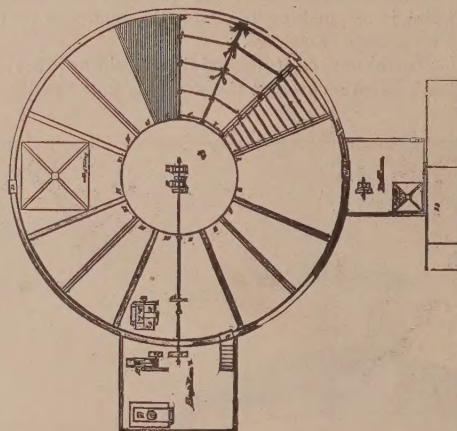


FIG. 2.—GROUND PLAN OF ROUND ELEVATOR.

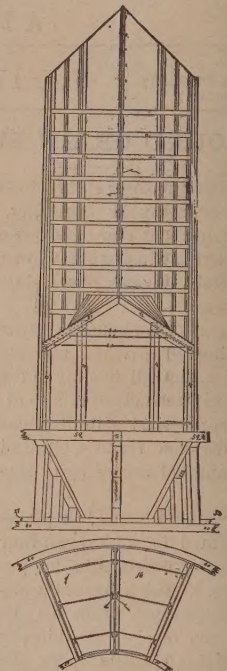


FIG. 3.—SHOWING CONSTRUCTION OF ELEVATED BINS.

be a single gear wheel of any kind, nor should there be any upright shafts. Upright shafts always mean gearing. The objections to gearing in an elevator are very obvious. It is certainly impossible, on account of the alternate filling up and emptying of the elevator, to keep the machinery in proper position and the shafting level and in line. When shafting can be kept in perfect level and in line, gearing will work with tolerable, and only tolerable, decency, but when out of level and in line the effect is most intolerable.

There should be no gearing in an elevator; grain men must bear that fact in mind if they desire to have an elevator run smoothly and well. In the Southwest, especially, the handling and shelling of corn is one of the chief considerations in building an elevator. The house should be arranged with the view of taking care of ear corn quickly and conveniently. As a rule the bulk of the corn is delivered at country elevators, between the hours of 9 A. M. and 3 P. M., and the shelling capacity should be equal to taking care of all the stuff that arrives during that time, so as not to keep customers waiting to get rid of their load. The sheller should be placed under a dump, and large enough to shell the corn about as fast as it can be dumped. The cleaner should be placed in the top of the building, and the corn and cobs taken from sheller to cleaner, this to be separated, and the corn cleaned ready for market. By having the cleaner up at the top, the corn can be spouted from it direct to the various bins, and the cobs outside of the house down into the fire room, or anywhere else out of the way. An ar-

completed, and they only stamp such plates as are critically adjudged to be "perfects." They stamp no wasters with the above brand, and announce that no wasters of their production will, with their knowledge or sanction, be sent to the United States, but will be disposed of in England under some other mark. From the first portion of this arrangement there can be no dissent, and it ought to secure for W. Gilbertson & Co.'s brand a high reputation and a large sale in the United States. The wisdom of the plan thus adopted is so obvious that we might expect it to be generally adopted in the tin plate trade, yet the sinuosities and subtle intricacies of that business are so numerous and confusing that such a result is highly improbable. Deceptions and "juggles" by means of wasters are so profitable to many of the merchants and dealers that they will probably resist any such change, whilst the speculators, of course, will oppose any alteration which would be likely to simplify the business or to limit their opportunities for "hocusing" both buyers and sellers. A good example has been set in this instance, however, and we hope that some, at least, of the manufacturers will have sufficient backbone to follow suit.

—Of the 32,900,560 bushels of wheat received in Minneapolis last year, the Milwaukee road brought in 8,857,520 bushels, the Omaha 5,377,120, the Minneapolis & St. Louis 3,150,000, the Manitoba 13,157,120, the Northern Pacific 1,917,440, the St. Paul & Duluth 227,920, and the Wisconsin Central 13,440.

the harvest, threshing, etc., also many ears are filled only partially.

To ascertain with some accuracy the actual produce of a grain of wheat, Dr. Paley planted a small piece of garden ground, of moderate wheat-growing quality, with three separate parcels of wheat, each containing fifty average grains. The first parcel was sown broadcast, the second was set in two rows, and the third in separate holes, six inches apart—all carefully covered with earth.

Besides he planted twelve grains $3\frac{1}{2}$ inches deep and three grains one inch deep. Of the 50 grains sown broadcast 25 came up, producing one plant of three stalks, six of four, three of five, seven of seven, and three of nine, with a total of 148 ear-bearing stalks. Of the second group 30 grains germinated, producing two plants of two stalks, eight of three, one of four, ten of five, six of seven, two of ten, and one of eleven, a total of 141 ear-bearing stalks. The third group produced 32 plants with a total of 148 ear-bearing stalks. Of the fourth group not a single grain germinated, and of the fifth only one, which did not thrive well.

As to the first and third groups the average was nearly three stalks from each grain sown, and estimating the yield of each ear at 50 sound grains, the crop still would be 150 fold. But the actual production is greatly diminished by various kinds of blights, such as smut, mildew, etc., and by many other causes, some of which we have mentioned above, and all of which, taken in the aggregate, cause the extraordinary difference between theory and practice in the matter of yield.

THE ADAMS POWER CAR PULLER.

[PATENT APPLIED FOR.]

A device which could be used in place of a switch engine to pull cars in and around yards, elevators, mills, etc., is a great desideratum, both on the score of economy and convenience. Such a device is that recently invented by MR. W. G. ADAMS, of Sandwich, Ill., the well known manufacturer of elevator machinery, whose name is familiar to the grain men of the West. Mr. Adams has frequently seen the necessity for some such contrivance, and several times has made machines for this purpose on orders; but he found that any ordinary device for handling cars by power must be made with a view to the individual case where it was to be used, often requiring changes in existing machinery that made it troublesome to adopt. Therefore he addressed himself to the problem of constructing a machine which could be adapted to ordinary conditions as they exist in mills, elevators and the like.

Our illustrations give an excellent idea of this useful device. *Fig. 2* shows the machine, while *Fig. 1* shows its method of operation in a grain house. *Figs. 3, 4* and *5* merely show the various ways in which it may be con-

ing Co., who have purchased this machine, on the acquisition of so great a labor saver, as he has often counted twenty men shoving a car over this same track, and knows that this machine must meet a hearty reception from those who have in the past experienced the inconvenience of moving cars without a device of this kind."

The following letter will show how the purchasers of the machine mentioned above regard it:

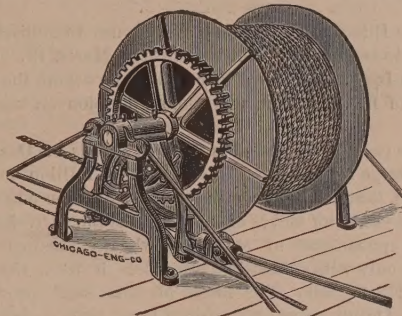


FIG. 2.—THE ADAMS POWER CAR PULLER.

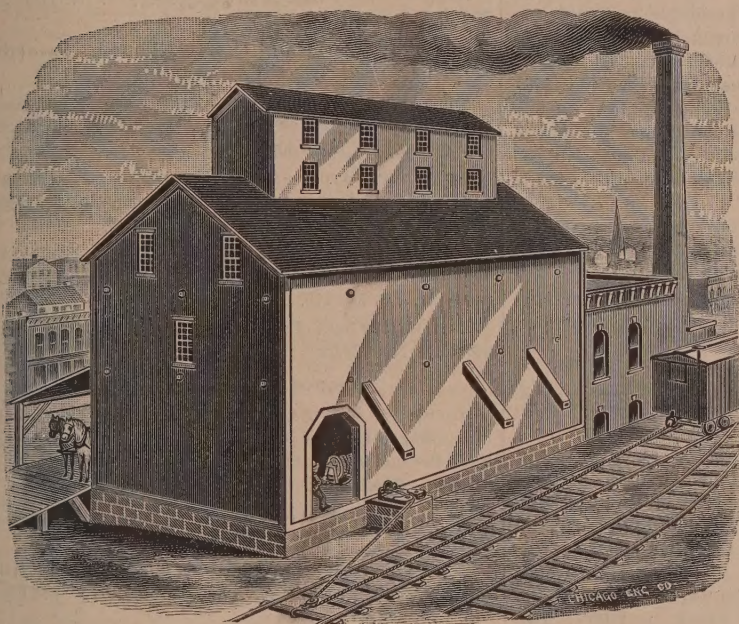


FIG. 1.—THE CAR PULLER IN OPERATION.

nected with driving shaft. By means of a universal joint the car puller may be set at almost any angle with driving shaft or railroad track, thus making it practicable to utilize any space in the warehouse or mill that can be best spared for that purpose. The space required for the machine is only 38x40 inches and 40 inches in height. One great advantage it has, is that when you want to carry your rope out to the car, the drum is entirely free, so that there is no friction to be overcome except that of the drum revolving loosely on the shaft. As at present constructed, the machine is adapted to both water and steam power, and Mr. Adams expects to adapt it for horse power as well.

An eye-witness of a recent trial of this machine thus speaks of it: "One of the largest-sized coal cars stood on the Sandwich Manufacturing Co.'s track, loaded with forty thousand pounds of coal. The rope was hitched to it and Mr. Adams, without slackening the speed of the engine, pulled a cord which set the machine into gear, when that car of coal started, without any apparent jar on the machinery and with a motion as positive as if drawn by a locomotive and moved along to the turntable; then the table was turned, the machine again started and that car went up grade over a track, covered with ice and dirt, to the coal house, just as if it could not help it. The writer of this article has had something to do with elevator machinery, and knows something about what it means when from five to twenty cars per day are to be loaded and moved; and when that forty thousand car of coal went up that icy, dirty track, he felt like congratulating Mr. Adams on the complete success of his invention and the Sandwich Manufactur-

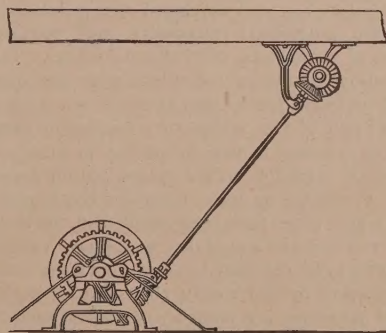


FIG. 5.—TAKING POWER BY GEAR FROM ABOVE.

Office of the Sandwich Manufacturing Company, Sandwich, Ill.

SANDWICH, ILL., March 10, 1886.

W. G. ADAMS—*Dear Sir*: The power car puller that we purchased of you some time ago has thus far given us perfect satisfaction. We have repeatedly given it as severe tests as a machine of the kind will ever be liable to be put to, in moving heavily-loaded cars of machinery, lumber, coal, etc., on the various tracks in our yard, frequently over icy and dirty tracks. One man with the assistance of the puller can, with the greatest ease, quickly place a car at any point in our yards, or turn it on the turn table. Having long felt the need of a machine of this kind, we greatly appreciate this labor saving device and feel confident that it will be received with great favor by all who have cars to handle without

the assistance of a switch engine. Congratulating you on the success of your invention, we are

Yours very truly,

H. A. ADAMS, Superintendent.

JOHN WOODWARD, Asst. Superintendent.

Mr. Adams will be pleased to give our readers any particulars respecting this device which they may desire, and will answer all communication addressed him as above.

SHEDD'S COMBINED GRAIN SCOURER, DRIER AND COOLER.

Mr. C. F. Shedd, of Fairfield, Neb., has perfected and patented a combined machine which may be used for scouring, drying and cooling grain. The device is virtually three machines, combined, so that with grain that requires only scouring, such as dull or badly stained barley, sprouted or musty wheat, etc., the drier and the cooler can be immediately converted into a scourer. The blower can be used when necessary. The steam and hot air apparatus are designed only for damp grain.

The machine consists essentially in the combination of a hot air pipe with branch pipes, which extend around

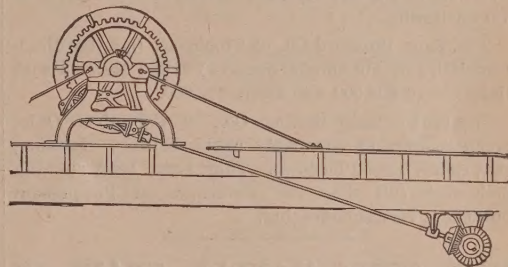


FIG. 3.—TAKING POWER FROM BENEATH.

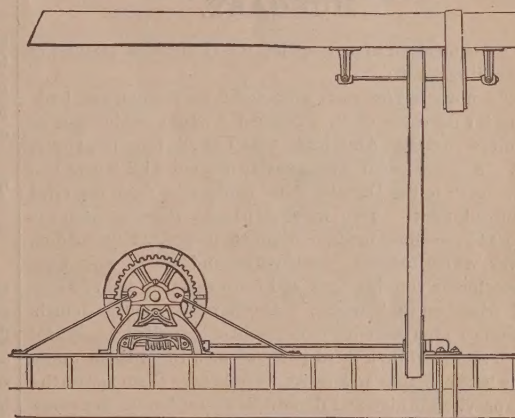


FIG. 4.—TAKING POWER BY BELT FROM ABOVE.

the body or frame, and through which frame perforations are made to admit the heated air to the grain; second, the combination of the perforated inclosing frame with cones and funnels arranged on the inside, and the steam pipes, the perforations through the inclosing frame being made just under the tops of the funnels; third, the combination of the revolving cones, the funnels, the blower and pipes which conduct the cold air into the inclosing frame, so as to cool the grain.

Mr. Shedd has had extensive experience in the grain business, and some seasons having large quantities of damp and otherwise damaged grain to handle, he was led to invent and perfect this machine. He believes that for economy in space, as well as in construction, it is in the lead. It is all, or nearly all, made of metal, which makes it safe against fire. It can be built for any capacity, being adapted to the small country elevator as well as the large storage elevators. Mr. Shedd will be pleased to correspond with interested parties. His address is Fairfield, Neb., to which place correspondence should be addressed.

There were 389,400 bushels of corn received in Minneapolis in 1885, as against 475,200 bushels the preceding year; 673,297 bushels in 1888, and 1,054,350 bushels in 1882, and 43,800 bushels shipped against 58,200 bushels in 1884, 110,055 bushels in 1883 and 679,220 bushels in 1882. Receipts of oats last year amounted to 701,900 bushels, against 700,800 in 1884. Shipments were 56,800 bushels against 32,800 bushels in 1883.



The Frost Mfg. Co., of Galesburg, Ill., are having plenty to do, and anticipate an unusually good year.

The works of the Stilwell & Bierce Mfg. Co., Dayton, Ohio, are running steadily, doing their full share of work.

The Barnard & Leas Mfg. Co., Moline, Ill., have been furnishing several lots of elevator machinery for Kansas parties.

The Case Mfg. Co. report a very active business for this time of the year, and expect a lively season in their line.

M. F. Seeley, of Seeley, Son & Co., elevator builders at Fremont, Neb., has taken out another patent on grain elevators.

Geo. L. Jarrett, Des Moines, Iowa, has been enjoying a lively trade with the elevators, and reports prospects as very flattering.

The Thos. Bradford Co., of Cincinnati (not the Bradford Mill Co., but another concern), failed March 1 with liabilities of \$35,000, and assets \$20,000.

The Roller Chain Belting Co., of Columbus, Ohio, manufacturers of detachable chain belting, elevators, etc., report a good business. They have been running their works full time the past winter, and the present outlook is very encouraging.

HOW THEY HANDLE GRAIN IN HUNGARY.

An American thus describes the Hungarian method of handling grain:

"A noise not far away attracted my attention, and looking for the cause of it, I noticed a sight which was so unlike anything American, that I shall long remember it. A large canal boat heavily loaded with wheat had anchored in the Danube about thirty feet from the river embankment. Two narrow planks thrown from the boat to the shore made a somewhat precarious bridge, over which between twenty-five and thirty men were seen busily running back and forth carrying heavy sacks of wheat on their backs. Another but smaller detachment of men were busy on the boat shoveling the wheat into sacks, while a third party of men lifted them up on the backs of the carriers, who would take them across the improvised bridge and deposit their burden on the stone pavement of the river shore. In a comparatively short time several hundred sacks of wheat were in this manner transferred from the boat to the land, when five teams with double spans of horses arrived to haul away the sacks of wheat, which were, of course, lifted once more by some men on to the drays. I counted, in all over forty men who were employed in the operation of unloading one boat load of wheat. I was anxious to see where the grain was transferred to, and followed one of the teams, expecting to bring up in front of one of the great flouring mills. But what a mistake! After following the team for a considerable distance it stopped at a tenement house, in the basement and cellar of which the wheat was stored for a flouring mill. The wheat was emptied out of the sacks and thrown out on the floor of the rooms in great piles. To be transferred to the mill it will have, of course, to be sacked once more, and to be lifted from the basement into the wagons and be hauled for a mile or more to the mill where it is at last converted into flour.

"Any one accustomed to American railroad and shipping facilities, and our way of handling grain, coal or kindred material, can not comprehend such terribly slow proceedings, and the great amount of unnecessary labor thrown away on a few hundred sacks of grain. I felt interested enough to investigate this matter a little further, and to my great astonishment learned that but one of the sixteen great flouring mills in Budapest has a railroad track at its disposal. All the other mills receive their wheat and all other material by team, and every sack of flour or bran is moved to this railroad station by horse-flesh! As some of the mills have the railroads quite near at hand, I could not understand why they were not made available and brought into communi-

cation with the mills. On inquiry I was informed that the government and city legislation, as well as the railroad management itself, put so many obstacles and conditions in the way that the mills find it impossible to do anything, and under the circumstances a railroad track would be useless should they succeed in getting the permission from the authorities to build one."

FROSTED WHEAT AND ITS GRADE.

The Illinois Railroad and Warehouse Commissioners were in session in this city Saturday, March 13. Chief Grain Inspector P. Bird Price laid before them the question of frosted wheat, and asked a decision on the subject.

The case briefly stated is this: There is in Dakota a very large lot of frosted wheat, several million bushels in fact, that has been coming to Duluth. The wheat has a very fair color and is clean, but it has the shriveled and dried appearance of shrunken wheat. The inspectors could only with difficulty distinguish it from the ordinary No. 3 grade. The looks of this stuff prompted some Duluth shippers to ship it here, and a few cars passed through the inspection bureau as No. 3. This fact emboldened them, and more of the stuff was shipped. When the samples were brought to the notice of Chief Inspector Price he noticed that the wheat was frosted, unripe, and nearly worthless for food. He at once summoned the commissioners, and yesterday the matter was considered. Millers were brought before the commission and they testified that the stuff was only good for manufacturing purposes, and that there was little or no nourishment in it. The gluten is almost entirely absent, and the market value was less than 60 cents per bushel. The grain had been frosted before it had matured, and what little there was of it that contained nutriment would not average 15 per cent.

The commissioners decided that this wheat should be graded, and henceforth known as No. 4, and the Chief Grain Inspector was instructed accordingly. The promptness of the Chicago Bureau in detecting the fraud punctures a very pretty scheme for unloading the frosted crop upon Chicago.

THE TRADE AT PHILADELPHIA.

PHILADELPHIA, March 8, 1886.

There is little or no change to notice in the business situation. Trade generally is very quiet at seaboard points, but in many of the interior distributing centers the movement of merchandise is reported as fairly active, indicating that supplies are being steadily absorbed, and thereby preparing the way for the replenishing of stocks that must follow sooner or later. The outlook continues promising, and an early resumption of active buying is confidently expected, especially as no new feature has been developed that is calculated to check the progressive prosperity and recuperative tendency of commercial and industrial affairs. Trade is in a healthy condition, notwithstanding the quietude that has prevailed for the past month or six weeks, and the best proof of the satisfactory position of industrial enterprise is found in the disposition to accede to the demands of labor for higher wages within reasonable limits. Profits are no doubt comparatively narrow, and where higher prices have been established, the increased cost of raw material and higher wages have neutralized the benefits to be obtained by manufacturers, but they are encouraged by the steady absorption of their products and the improving tendency of general trade, which underlie the surface currents that at present prevail.

There have been fairly active speculative dealings in wheat last week, but the price changes have been comparatively unimportant. A steady export demand has prevailed, chiefly for spring wheat in New York, and the "bears" have lacked the courage to sell the market down. On the other hand, while holders of the grain have felt confident as regards the future, there has been no disposition to force prices above the basis which would effectually check foreign buying. The highest point of the week showed an advance $\frac{3}{4}$ to 1 cent per bushel as compared with week before last, and at the close on Saturday an improvement of $\frac{5}{8}$ c. Milling demand has been fair at firm prices. Sales of 45,000 bushels No. 2 red, March, at $90\frac{1}{2}$ to $91\frac{1}{4}$ c.; 65,000 bushels, do., April, at $91\frac{1}{4}$ to $92\frac{1}{2}$ c.; 375,000 bushels, do., May, at $92\frac{3}{8}$ to $93\frac{1}{4}$ c., and about 65,000 bushels in lots including No. 2 red, at $90\frac{1}{2}$ to $91\frac{1}{4}$ c.; No. 2 Delaware

red at 96 to $96\frac{1}{4}$ c., and No. 1 Pennsylvania red, at 99 to $99\frac{3}{4}$ c. To-day the wheat market was firm and advanced $\frac{1}{2}$ to $\frac{5}{8}$ c., under stronger reports from other centers. There was a fair inquiry for No. 2 red to fill freights, and a moderate demand for No. 2 Delaware red for new business, but offerings of these grades were light, and orders for No. 2 Delaware were under the market. Milling demand was light. Sales of 5,000 bushels No. 2 red, spot, at $91\frac{3}{4}$ c.; 25,000 bushels, do., April, at $92\frac{3}{4}$ c., and 60,000 bushels, do., May, at $93\frac{1}{2}$ to $93\frac{3}{4}$ c.

Wheat No. 2 Red:

1 P. M. TO-DAY.

	Bid.	Ask.
March.....	91 $\frac{3}{4}$	92
April.....	92 $\frac{3}{4}$	93
May.....	93 $\frac{1}{2}$	93 $\frac{3}{4}$
June.....	94 $\frac{1}{2}$	94 $\frac{3}{4}$
15,000 bushels No. 2 red, March, sold at 91 $\frac{3}{4}$.		
Stock of wheat to-day.....		
Stock of wheat same date last year.....		
	804,132	706,362



Issued on Feb. 16, 1886.

BALING PRESS.—George Ertel, Quincy, Ill. (No model.) No. 336,305. Filed Dec. 15, 1885.

DUMPING CAR.—Sidney D. King, Pittston, Pa. (No model.) No. 336,119. Filed Oct. 19, 1885.

MECHANISM FOR EXTRACTING STEEL AND IRON FRAGMENTS FROM GRAIN.—Frank E. Fisher, Detroit, Mich. (No model.) No. 336,402. Filed June 30, 1885.

GRAIN SEPARATOR.—Addison Lent, Sleepy Eye, Minn., assignor of one-half to Leroy G. Davis, same place. (No model.) No. 336,246. Filed Sept. 11, 1885.

OIL SEED MEAL-HEATING MACHINERY.—Daniel A. Tompkins and Frederick Oliver, Charlotte, N. C. (No model.) No. 336,175. Filed Oct. 18, 1884.

METAL ROOFING.—James H. Eller, Canton, Ohio. (No model.) No. 336,098. Filed Nov. 23, 1885.

Issued on Feb. 23, 1886.

DEVICE FOR MOVING CARS.—Edward P. Weaver, Shelby, Mo., assignor of one-half to Taylor Thompson and R. E. Bodine, both of same place. (No model.) No. 336,609. Filed Jan. 2, 1886.

DRIVE CHAIN.—Chas. E. Alden, Philadelphia, Pa. (No model.) No. 336,779. Filed March 20, 1885.

COCKLE SEPARATOR.—Charles A. McCollom and Milton Forder, Dassel, Minn. (No model.) No. 336,655. Filed March 11, 1885.

GRAIN ELEVATOR.—Marquis F. Seeley, Fremont, Neb. (No model.) No. 336,755. Filed June 13, 1885.

Issued on March 2, 1886.

BALING PRESS.—Walter S. Bryan, Kosse, Tex., assignor to himself and George Dallas Johnson, same place. (No model.) No. 337,237. Filed Nov. 27, 1885.

CAR STARTER.—Willis H. Johnson, Springfield, Ill. (No model.) No. 336,922. Filed July 15, 1885.

DRIVE CHAIN.—Jos. A. Jeffrey, Columbus, Ohio. (No model.) No. 336,921. Filed Aug. 18, 1882.

COCKLE AND GRAIN SEPARATOR.—John B. Dishmaker, Carlton, Wis. (No model.) No. 337,051. Filed July 20, 1885.

ELEVATOR BUCKET.—Harry B. Haigh, Brooklyn, assignor to the Iron Clad Manufacturing Co., New York, N. Y. (No model.) No. 336,916. Filed June 27, 1885.

GRAIN DRIER.—Charles Ehlermann, St. Louis, Mo., and Charles G. Mayer, Nauvoo, Ill. (No model.) No. 336,905. Filed Feb. 2, 1885.

GRAIN SEPARATOR AND CLEANER.—John P. Bond, Warsaw, Ind. (No model.) No. 337,234. Filed Oct. 28, 1885.

Issued on March 9, 1886.

BALING PRESS.—George Ertel, Quincy, Ill. (No model.) No. 337,576. Filed Oct. 24, 1885.

APPARATUS FOR TRANSFERRING GRAIN, ETC.—Alexander B. Fernald and David T. Lawson, Jersey City, N. J. (No model.) No. 337,338. Filed Jan. 21, 1885.

THE Howe Scales have all the latest improvements. It is true economy to buy the best. Borden, Selleck & Co., agents, Chicago, Ill.

THE CHICAGO BOARD OF TRADE.

Is the influence of this notable Chicago institution wholly beneficial upon the welfare of the city and its tributary territory? Is it absolutely necessary to the carrying on of the legitimate grain and provision trade of the country that there should be such violent proceedings? Concerning the last query the visitor might at first be inclined to answer negatively, and argue with himself thus: Grain and provisions are constantly being bought and sold at other points in the land without any such hurrah and excitement and why cannot the same be done here? Such an enormous outlay of money as this building and business involves and such a wild hubbalooboo are surely incongruous with the quiet transfer of such common articles as wheat, corn and pork. Why not meet together calmly, in some common center, and dispose of these products in a sober and rational manner? And it must be confessed that the visitor's argument would be a good one if it were not for one element of this trade which he does not accurately estimate or properly understand.

This element is known in popular parlance as speculation, and constitutes more than two-thirds of the entire activity presented to view. The regular legitimate transaction on all Boards of Trade could indeed be carried on without so much attending commotion, but in that case the business itself would shrink to very moderate proportions as compared with its present volume. Dealing in "futures" of grain and provisions imparts that element of risk and danger to the trade which causes an incessant and rapid fluctuation of values, and is attended with so much nervous anxiety and commercial uncertainty. Hence the silent argument of the visitor virtually resolves itself into this proposition: Could the grain and provision trade of this country be conducted in such a way as to eliminate entirely the speculative element, as is the case in many of the markets of the Old World? Such a question is a very far-reaching and important one, and would be answered in different ways by different minds. At the present time the majority of replies among those engaged in it would make a preponderating and decided negative. Still the fact remains that in former times, even in Chicago, this speculative feature of the business was almost wholly absent. The growth of speculation in grain and provisions has sprung apparently from the growth of the trade itself. Little by little it crept in among regular and legitimate transactions, and soon spread itself over the entire area which those transactions covered. At first only an unimportant adjunct of the business, it has now grown to such immense proportions as to throw legitimate and regular trade far into the shade. To-day two-thirds or more of all the trading done on the floor of the Board is purely speculative in character. It is buying and selling futures or options. Just now the May option is the favorite deal, and buying and selling grain and provisions deliverable next May make up the bulk of the daily exchanges. Take this dealing in futures away from the Board of Trade and its hall would become at once a quiet lounging place for shippers and exporters. No such building, in fact, would be needed, as a much less expensive room would accommodate all who would naturally gather there. The present colossal structure, it should always be remembered, was erected by speculators for speculative trading principally, and the shipping and exporting business carried on at the same time and place forms only an inconsiderable part thereof. Under present circumstances, therefore, it would be nearly or quite impossible to eliminate this speculative feature of trade in grain and provisions without seriously, and perhaps fatally, curtailing the trade itself. The vigorous offshoot has entirely overshadowed the parent trunk from which it grew. The boy has outgrown his father, and dominates the "old gent" to carry out his own sweet will and behests.

It cannot be denied that certain objectionable concomitants have arisen from this speculative trading, but how to remove them has not yet been made manifest. One of these is the practice of dealing in "puts" and "calls," which leads to more or less artificial manipulation of prices in order to "protect" buyers and sellers in their speculative ventures. When such manipulation arrests the natural tendency of values and brings about a false and short-lived movement in an opposite direction, it creates for the time being an illusive aspect of trade that misleads and injures the simple-minded and would-be honest operators. And all such losses or gains make legitimate trading more and more difficult and danger

ous. In this way and by such methods all speculation inevitably tends to burn itself out like a volcano, leaving only devastation and wreck behind. As an example of this effect one has only to read the history of the rise and progress of mining speculation as carried on in former years in San Francisco and in other cities of the Pacific coast.

This brings us directly to the consideration of the first question which came into the visitor's mind, namely: Is the influence of this notable Chicago institution wholly beneficial upon the welfare of the city and its tributary territory? It goes without saying that an association of this commercial character and magnitude would necessarily be a power for good or evil. Located in the heart of the city, and embracing in its membership many of the most prominent citizens, a continuous wave of influence would naturally emanate from its presence and daily activities. And such is found to be the actual result. There are, in fact, but few business men in this city or in the surrounding country who have never "tried their luck" in a speculative deal of some kind. Of course, the vast majority of these ventures have proved unsuccessful to their originators, but in these cases what was lost by one party has always been gained by another, so that the net financial result of the different transactions has been a simple change in the ownership of money. Physically, the result of this business has been an undoubted loss of nervous tissue caused by undue excitement while the deal was in progress. Mentally, the result has been a decided quickening of intellectual perceptions concerning the hidden relations of cause and effect. Experience certainly keeps a dear school, but the majority of business men learn in no other, and the knowledge thus imparted is usually found to be of incalculable worth in after life. Morally, this business has been the occasion of much profanity, vain regret, and keen, biting remorse. Many an unlucky speculator has been led to curse the day of his own birth, as well as that of the business, and has been ready to declare emphatically that the Board of Trade and its operators were nothing but a gigantic delusion and a snare. All these, however, are but personal results. Commercially and financially the Board of Trade is a direct promoter of general business activity and prosperity. The amount of capital that is kept in circulation by its operations is enormous, and the employment it furnishes to thousands of traders and dealers, here and elsewhere, contributes materially to the sum total of commercial industry. This country produces annually, on an average, about 450,000,000 bushels of wheat, 1,500,000,000 bushels of corn, and 15,000,000 hogs, to say nothing of oats, rye and barley, and these immense products must be handled by somebody. To take them from the producer and put them in the hands of the consumers requires a vast amount of money and an equally large amount of labor, and were there no organizations or special means to facilitate this transfer enormous quantities of stuff would inevitably be wasted before they could be marketed. In this way Boards of Trade all over the country are of great benefit to producers and consumers alike, as they fix a price for the stuff and carry large quantities of it until it is wanted for use. In fact, the modern system of commercial exchanges could hardly dispense with these agencies, and as long as the present agricultural products of the country continue to be grown, so long will there be a class of men who will organize and work together in buying and selling them.

Hence it would be an altogether rash and hasty conclusion to say that this notable institution of Chicago is an un-mixed evil so far as its influence upon the welfare of the city and country is concerned. Certain branches of the business could undoubtedly be lopped off with advantage to all parties, but these features are of the nature of excrescences or fungus growths rather than inherent and organic parts of its body. The enterprise, ambition, and go-ahead power of speculators are proverbial, and if our Board of Trade should ever collapse or be obliterated (which is hardly a possibility), it would leave a large vacancy in our commercial life, and be justly regarded as an undoubted calamity. It is felt, however, by its best friends and warmest supporters that something ought to be done to check the growing manipulation of prices for sinister and speculative ends, but just how to accomplish this result is at present an unsolved problem. It may be that the evil in question will in time correct itself by bringing about a loss of legitimate business to the institution, and, in fact, such a loss is already quite severely felt. Of course, no public institution dependent upon the patronage of the public for its support and

prosperity can afford to carry on its business so as to mislead and disappoint and financially injure all outside parties who come to it for the purpose of buying and selling its stable commodities. Right here is the weakest and worst part in this institution. The increase and growth of this method of dealing with each other and with outside patrons has brought down upon the institution itself more curses, and stirred up more hostile feelings against it among the general public, than all other causes and occurrences combined.

But with all its faults and excellencies Chicago's Board of Trade is here to stay. It is, and always will be, one of our most noted and most notable institutions. Its palatial mart is an architectural ornament of which every citizen is proud, and its business might be equally a matter of congratulation and satisfaction to one and all if the purely speculative part of it could be kept within the bounds of strict honor and just, upright dealing.



Grain men, and all interested, are invited to make contributions to this page. The publishers do not indorse or hold themselves responsible for the sentiments expressed.]

CHICAGO GRADES.

Editor American Elevator and Grain Trade:—I notice every once in a while that country shippers write to complain of the injustice of Chicago grades, especially of corn. It is asserted that the grading is too severe at this point, and that the cases of injustice that are constantly occurring operate to divert the trade from Chicago.

Now without a doubt there are instances where grain has been graded down; and there may be cases of downright injustice; but it must be remembered that inspectors are not infallible. This is shown from the fact that in nearly 50 per cent. of the appeals the grain has received a higher grade. The inspectors have no interest in lowering the grade of grain. Then again, let it be remembered that a lax method of grading would in the end result in low prices. A reasonably rigid inspection is the only guarantee that buyers and sellers can have; and Chicago inspection is not more rigid than sound, commercial policy dictates.

Yours truly, RECEIVER.

FLAX GROWING.

Editor American Elevator and Grain Trade:—The growing of flax is sure to become a staple industry in the Northwest, and even now flax is taking the place of wheat in some localities. It has been asserted that flax is a very exhaustive crop, and this has doubtless deterred many farmers from its cultivation. The fact is that flax is no more exhausting than the cereals. Besides, flax takes from the soils the very matter with which so much of our Western land is overcharged—the alkalies. An acre of flax will take from the soil about fifty pounds of alkaloid and half that amount of phosphoric acid; but this can nearly all be returned to the soil if the straw be used as a fertilizer. I am convinced that when our farmers understand this matter more thoroughly the cultivation of flax will become more general.

Yours, W. H. SCOTT.

Fargo, Dak.

ELEVATOR CHARGES IN CHICAGO.

Editor American Elevator and Grain Trade:—It has been stated in your columns and in other Chicago papers that the Chicago elevators were driving grain away from Chicago by their high rates of storage and transfer. Possibly a low rate for a short storage term and transfer might be well, but it must be remembered that Eastern roads have been charging only a nominal sum for transfer (sixty cents a car) in order to secure the business. Of course the elevators cannot compete with any such charges as that; and that is why so much grain goes around Chicago; not because the elevator charges are extortionate, but because the roads transfer the grain at a purely nominal figure in order to get the carrying business.

Yours truly, B.

LEGAL NOTES.

Bill of Lading—Stipulation Against Liability for Delay.

A bill of lading had the stipulation that "the carrier shall not be liable for loss or damage of any kind occasioned by delays from any cause," and in a suit for damages for the failure to deliver a shipment of cotton in due time the defense was set up that the bill of lading absolved the carrier from any responsibility for the delay. The plaintiff recovered, and the defendant appealed the case (*Berje vs. Texas & Pacific Railroad Co.*) to the Supreme Court of Louisiana, where the judgment was affirmed. Judge Manning, in the opinion, said: "1. The clause stipulating for non-liability from loss from delays from any cause has uniformly been held to be unreasonable, and the insertion of it in a bill of lading will not relieve the carrier from liability for losses occasioned by negligence. 2. The breach of the contract in this case was active; a negligent delay in delivering the cotton, or a defective execution of the contract to carry it, put the defendant thoroughly in default, and he must respond in damages. 3. As to damages: First, there is the loss in replacing the undelivered cotton by buying other cotton in the market at the advance price. The plaintiff had the right to expect the cotton at or near a fixed time. His contracts with others were made on that expectation, and when he was disappointed he had to go on the market and buy to replace that which the defendant had contracted to deliver. This item is not for prospective but for actual loss; not for the loss of profits, but for an outlay of money. The whole theory of damages is based on indemnity, and the indemnity here asked is of money expended in buying cotton which the plaintiff would not have had to buy if the defendant had delivered the cotton in reasonable time. Second, then there is the item of extra expenses incurred in reweighing and reclassing the cotton, and for extra drayage, because it was received in small quantities or dribbles; in other words, damages for negligent delivery. This, of course, must be allowed. And then, in the third place, is for the loss of the market on 317 bales, and the loss of interest. These must be given; they have been fully proved. The judgment, clearly, must be affirmed.

Bill of Lading—Shortage in Grain Cargo.

District Court of the United States for the Eastern District of Michigan.

Robert Law vs. John E. Botsford et al.
1. A vessel discharges her whole duty to her cargo by delivering in good order all that she has received.
2. A custom to deduct from the freight earned the value of any deficiency between the quantity delivered and that stated in the bill of lading, and that the carrier shall not be permitted to show that he delivered all he received, is unreasonable and invalid.
3. The master has no power to bind the vessel by an agreement in the bill of lading that the same shall be conclusive as between the shippers and carrier as to the quantity of cargo to be delivered to the consignees.

Brown, J.

This is a libel *in personam* for freight. The facts in the case are substantially as follows:

In November, 1884, the schooner *Lizzie A. Law* took on board at Port Huron a cargo of wheat for Buffalo, and received two bills of lading amounting to the sum of 46,047 bushels. The second mate attended to the loading in of the wheat from the elevator at Port Huron, and with the weighman of the elevator tallied the separate bins as they went on board the schooners, and upon completing the lading the master received two bills of lading, signed by the defendants (but as to that no point is made), for this amount. The bills of lading contained the following somewhat extraordinary stipulation:

"It is agreed between the carriers, and shippers, and assigns, that in consideration especially of the freight hereon named, the said carriers, having supervised the weighing of said cargo on board, hereby agree that this bill of lading shall be conclusive as between shippers and assigns, and carriers as to the quantity of cargo to be delivered to consignees at the port of destination (except when grain is heated or heats in transit), and that they will deliver the full quantity hereon named, or pay for any part of the cargo not delivered at the current market price; the value hereof to be deducted from the freight money by consignees, if they shall so elect, and thereupon the carrier shall be subrogated to the shippers' and

owners' rights of property and action therefor." The address on the margin was as follows: "Order of J. E. & W. F. Botsford, New York. Notify David Dows & Co., care E. B. Wilbur & Co., Buffalo, for transshipment only, identity to be preserved."

The vessel proceeded to Buffalo with her cargo, where it was weighed out at the elevators, and, as is not unusual, there was an apparent shortage of some 496 bushels. The elevator at Buffalo, conforming to a usage which is said to be well known, and indeed universal, deducted the value of these 496 bushels from the freight and paid the residue to the master of the vessel. This action is brought to recover the amount of this unpaid balance of freight.

That the custom of deducting shortages in this way is, in the absence of any express stipulation, unreasonable and invalid, was settled by the Supreme Court of this state in the case of *Strong vs. The Grand Trunk R. R. Co.* (15 Mich. 206), in which the court held that the usage was an entirely one-sided one, and that the man could not thus act as judge and executioner in his own cause. It is a custom which has repeatedly held void by the courts, and one which has been submitted to by ship masters because the amount of the shortage is usually too small to justify the expense of litigation. At the same time there is no doubt that the vessel is bound to deliver all that she received, and that the fact that the cargo, when weighed out, does not tally as much as it did when it was weighed in, creates the presumption that some of it has been lost in transit, and throws upon the vessel the burden of showing that there has been no loss. But if the intermediate consignee deducts from the freight the value of the shortage, he does so at the peril of its being recovered back, if, in fact, there has been no loss in transit. In this case it appears very clearly, and that is one of the points in the case about which there is practically no dispute, that there was no loss in transit. The *Lizzie A. Law* delivered all she received. There was evidence tending to show that, at the Lime Kilns, a portion of the cargo was taken from one hatch and wheeled over to another hatch, merely as a shift, for the purpose of decreasing the draught of the vessel forward and increasing it aft—in other words, to trim the vessel so that she could get over the Lime Kilns. But there is no evidence that a bushel of the wheat was lost; indeed, the evidence is explicit that there was none.

It cannot be too well understood that a vessel has discharged her entire duty when she has delivered all she has received. This is not only the dictate of common sense, but is also the law as laid down in *Shepherd vs. Naylor*, 5 Gray 591, and *Kelley vs. Bowker*, 11 Gray 428. So that, while the fact that the vessel did not tally as much at Buffalo as at Port Huron, cast upon the master the burden of proving that she delivered all that she received, he fully satisfied this requirement, and hence, I think, is exonerated from liability in that particular. In this view it is not necessary for me to solve the question, which in its nature is insoluble, viz., whether the cargo was correctly weighed at Port Huron or at Buffalo. It is impossible for us to tell at this time where the mistake occurred. There was a mistake in measuring this cargo either in-board or out-board. If the mistake occurred at Buffalo, then the vessel is entitled to her freight upon the whole amount of the bill of lading. If the mistake occurred at Port Huron she is entitled to her freight upon the Buffalo weight. As this is all that is claimed in this case, I am not obliged to determine whether the mistake was at one point or the other.

That the defendants in this case, aside from the stipulation in the bill of lading, are liable for the unpaid freight is beyond question. They were the consignors of the cargo, and the rule is well settled that the consignors may be resorted to, notwithstanding the cargo has been delivered to the consignee. That the original contract of the vessel is with him, and that the master may waive his remedy against the consignee, and resort to the consignor, I believe is uniformly held by the authorities. But in this case the defendants were not only the consignors but they were also the consignees. The bill of lading is addressed to the order of J. E. & W. F. Botsford, New York, care of E. D. Wilbur & Co., Buffalo. The rule is also well settled that where the cargo is consigned to the care of another, that person is only the agent of the final consignee, who in this case is the consignor, so that whether the defendants be used as consignors or consignees, the action will lie against them. *Hutchinson on Carriers*, Sec. 450.

It remains only to consider the effect of the stipulation

in the bill of lading, that the amount stated in the bill shall be conclusive as between the shippers and carriers. This is certainly a very singular stipulation, and was designed undoubtedly to obviate the difficulties which are thrown in the way of deducting shortage, but we think the answer to it is not a difficult one. It is well settled by the case of *Grant vs. Norway*, 10 C. B. 665, in England, and the schooner *Freeman*, 18 How. 182, in this country, that the master has no authority to sign a bill of lading for a cargo not laden on board. Now, this is nothing more nor less than such a contract. It is an agreement that the amount named in the bill of lading shall be conclusive upon the vessel, though never a bushel may have been laden on board. The master has no authority to make a stipulation of that kind. It is possible that it would be binding between the consignor and the owner of the vessel if he assented to it personally, but the power of the master to bind his ship is limited to contracts made in the usual and ordinary course of business. In the above case of the schooner *Freeman*, it is said by the Supreme Court that the master has no more an apparent unlimited authority to sign bills of lading than he has to sign bills of sale of the ship. See also *Pollard vs. Vinton*, 105 U. S. 7. His authority is to sign bills of lading of the usual tenor and description, consisting of a receipt for the amount shipped, subject to explanation, and a contract to deliver in the usual form at the port of destination. Such a contract the master has undoubtedly the right to sign, but he has no right to sign that contract before the cargo is laden on board. In this case there is no question of bona fide indorsement, and I think it is very clear that the stipulation, while it may perhaps bind the master personally, is not obligatory upon the vessel.

The libellant is entitled to a decree for the residue of his freight.

Feb. 8, 1886.

THE GRAIN CROPS.

The March report of the Department of Agriculture on the consumption and distribution of the grain crops makes the proportion of corn still in the hands of farmers 40 per cent. of the last crop; one year ago the proportion of the crop on hand was 37.6 per cent., two years ago 33 per cent. of the short crop of 1883. It amounts to 773,000,000 bushels, 98 more than last March, and 261 more than in March, 1884.

The proportion is lowest in the West, where heavy winter feeding is required, averaging 38 per cent. in twelve states. It is 45 per cent. in the South, where it is required for feed of plow teams in spring and early summer; and 40 in the Middle States.

The proportion merchantable is 33.8 per cent., which is slightly above the average of a series of years. The value of the merchantable averages 35.9 cents per bushel; of the unmerchantable 21.5 cents. This makes the average value of the stock on hand 33.3 cents, which is half a cent per bushel more than the December value of the crop when the aggregate value was estimated at \$35,000,000.

The stock of wheat in the hands of farmers is 30.1 per cent. of the crop. It was 33.1 one year ago, and 28.4 two years ago. It amounts to 107,000,000 bushels against 169 last March, and 119 two years ago. It is only 9,000,000 bushels more than in March, 1882, the shortest invisible supply of recent years.

The visible and invisible supply, March 1, was, therefore, 150,000,000 bushels against 212,000,000 last March.

The proportion of the crop estimated for consumption within the country where grown was 41.8 per cent.

The average weight per bushel, as estimated, is 57 pounds, against 53.3 for the previous crop, and 56.9 for that of 1884.

The consumption for bread and other uses, the seed sown and approximately 35,000,000 bushels exported since the 1st of March, 1885, makes a distribution equal to the supply from March last.

OVER 200,000 Howe Scales have been sold, and the demand is increasing continually. Borden, Selleck & Co., agents, Chicago, Ill.

The exports for February were: Flour, 573,135 barrels; wheat, 5,058,107 bushels; corn, 6,185,197 bushels; oats, 20,366 bushels; rye, 14,518 bushels; oatmeal, 1,864,938 pounds. For the same time last year they were: Flour, 881,778 barrels; wheat, 5,269,722 bushels; corn, 7,249,308 bushels; oats, 306,689 bushels; rye, 112,106 bushels; oatmeal, 3,214,523 pounds.

General Items.

A farmer near Groton, Dak., sowed and dragged in eight acres of wheat on Feb. 8.

Chicago No. 3 corn grades No. 2 in Baltimore, and occasionally passes in New York.

The stocks of wheat in country elevators in Dakota and Minnesota are estimated at 6,250,000 bushels.

Andrew Holman, treasurer of Nelson county, Dak., speculated in wheat, and the county is out \$11,000.

A carload of oats weighing forty-six pounds to the measured bushel was recently received by a Chicago firm from Northern Dakota.

Farmers in Lawrence county, Kan., have discovered that their stored wheat is spoiling, owing to the wet weather during harvest.

A sample of winter wheat from Logan county, Ill., which was exhibited Feb. 25, on 'Change at Chicago, showed a vigorous growth.

A proposal to establish state granaries in England, as a means of precaution against possible famine in time of war, is being seriously discussed.

A cargo of California wheat sold the other day in Liverpool at 93 cents per bushel. This is the lowest price California wheat ever touched in the foreign market.

We are not the only sufferers from a falling off of the wheat trade. The export of wheat from Australia to the United Kingdom during the month of January amounted to only 80,000 bushels, against 1,344,000 bushels during January, 1885.

Inspector Burdick anticipates no detrimental results to the grain trade of Duluth from the building of the elevator at West Superior. He thinks that Hill is not putting it up for himself, but believes it will be used as a mixing house.

The schooner Moonlight was chartered at Milwaukee, March 8, for 50,000 bushels of wheat to Buffalo on a through rate. She loaded March 9 at Smith's elevator. This was the first grain charter made at that port since early in December.

The Agricultural Bureau gives the visible and invisible stocks of wheat at 159,000,000 bushels, against 212,000,000 bushels last year, a decrease of 53,000,000 bushels of wheat from last year. In corn, however, stocks are 98,000,000 bushels greater.

Last year 126,637,431 bushels of flour and grain arrived in New York City from the West. The total exports of breadstuffs from the entire country amounted to 193,749,351 bushels, so that much the greater part of the breadstuffs is exported from that city.

The demand by interior millers for wheat already stored in the larger cities of the country is so much larger than is usual at this time of the year as to justify the belief that stocks in first hands are worked down to a very low point over large areas of the wheat-growing belt.

The available supply of wheat east of the Rockies and afloat on the ocean March 6 was 69,793,000 bushels, a decrease of 796,000 bushels from the previous week and 5,939,000 bushels from the same time last year. Supplies of corn were 17,300,000 bushels over the preceding week and 6,285,000 bushels over the same week last year.

The exports of wheat for the eight months ending Feb. 28 were: Wheat 29,606,897 bushels, and flour 5,117,160 barrels, against 67,767,683 bushels wheat and 6,790,871 barrels flour for the same time last year. Exports of corn for the eight months were 36,564,946 bushels this year against 27,611,770 bushels the same time last year.

In a rough, general way it may be stated that when corn sells at the seaboard at 50 cents a bushel the Western farmer gets one-half, or 25 cents on his share, and when wheat sells in New York at 95 cents a bushel the farmer gets about 70 cents. The Western farmer, therefore, receives a much larger proportion of the price of his wheat, but a smaller proportion of the price of his

corn than the Southern planter receives of the price of his cotton. When corn sells for 25 cents a bushel on the farm or at the nearest town, the farmer gets only about \$7.50 per acre for raising it, and when wheat sells for 70 cents a bushel in the country, the farmer gets only about \$9.10 per acre (thirteen bushels per acre) for raising it.—*St. Louis Globe-Democrat.*

Dr. H. H. Behr, of San Francisco, Cal., has called attention to the ravages of the weevil in the warehouses of that city. A small quantity of wheat taken from one of the warehouses contained hundreds of the insect. The worms can easily be separated from the wheat infected by running it over a slanting floor with a strong draught in the opposite direction.

A peculiar grain, taken from the crop of a wild goose—all peculiar grains are thus first discovered—has been sown by a farmer in the Saginaw Valley, who has raised five bushels. It is said to be unlike any other cereal known. A sample has been sent to Washington. Here is a chance for a speculation, to which the attention of Bohemian oat men is invited.

The farmers' deliveries of home-grown wheat in the United Kingdom from Jan. 1 to March 1 are estimated to have been about 12,480,000 bushels. The imports of wheat and flour were equivalent to about 17,060,000 bushels. The consumption during the same period is estimated at about 36,000,000 bushels, consequently there must have been a reduction in the visible supply of some 3,540,000 bushels from Jan. 1 to March 1.

Says a New York paper: The condition of foreign trade naturally attracts much attention at this time, the more because of the critical position of national finances with respect to the coinage. The steamer Schiedam left this port on the 18th ult. with 14,518 bushels of rye for Rotterdam. This was the first shipment from the United States since Oct. 23, 1885, when the Donau went to Bremen with 1,169 bushels, making the total since Sept. 1, 1885, only 61,981 bushels, against 1,998,097 bushels for the same period the year previous. The official statement for January shows that in the value of rye exported the decrease for seven months was \$1,596,232, and in quantity the falling off was 2,371,730 bushels.

Bradstreet's gives the Russian crop of 1885 at 220,800,000 bushels, against 294,890,000 bushels in 1884 and 230,730,000 in 1883. The home consumption of wheat ranges from 150,000,000 to 200,000,000 bushels, according to the crop of rye, which is the principal article of food of the peasantry. The rye crop of 1883 was 556,200,000 bushels, and did not equal home requirements. Russia's exports of wheat for nine months ending Oct. 1, 1885, were 66,918,000 bushels, against 68,220,000 bushels for twelve months in 1884 and 84,396,000 bushels in 1883. Last year Russian wheat was selling at 74 cents, and in 1884 at 96 cents. Russia's exports of flour in 1884 were 910,000 hundred-weights, against 793,000 hundred-weights in 1883, about one-half of which went to Turkey.

A Minneapolis dispatch says: "A year ago millers held 4,000,000 bushels of wheat in country elevators, but now only have 500,000. If this be true the actual amount of wheat in the Northwest is 2,500,000 bushels less than a year ago. With the mills running at an average capacity, as at present, they will require 7,500,000 bushels in the twenty-one weeks till Aug. 1, or nearly 1,000,000 more than is now in store in Minneapolis and St. Paul. But there was received at Minneapolis alone from March 1 to Aug. 1 last year 10,000,000 bushels, and 1,500,000 bushels were shipped. Should the receipts keep up as well this year there will be 8,500,000 bushels to add to the stocks already held. But it must be remembered that, as receipts have been so extraordinarily large during the past six weeks, they are likely to be much less during the months between now and harvest."

Mr. James H. Bailey, of Leading Creek, W. Va., thinks he has effectually solved the rat problem by the design of a granary building that will be entirely inaccessible to rats. It is well known that a rat can not climb up a post that is cased with sheet metal. This invention comprises the use of a number of uprights extending above the ground and supporting the building at a height that when the rat jumps up he will not get there. But, says one, the rats will run up the steps leading to the door. That is exactly what they won't do, for Mr. Bailey has provided means by which the steps, upon which access to the building is obtained, are hinged at the upper end, the lower end being connected with a rope that passes up over a pulley and is provided with a

weight that counterbalances it, so that with one finger the steps can be drawn down or raised up and the rats are left out in the cold.

The total number of acres in Minnesota planted to wheat in 1885 was 3,181,671, as against 3,109,874 in 1884. The corn acreage was 625,070 against 535,133 in 1884. The oat acreage was 1,095,002 in 1885; in 1884 it was 1,082,638. The barley acreage was 293,607 in 1885 and 285,252 in 1884. In 1885 there were 229,713 acres in flaxseed, and 126,845 in 1884. The average yield of wheat per acre—16.23 bushels—was the largest since 1877. The average corn yield—31.32 bushels per acre—was the largest since 1880.

There has been considerable talk of late about the large accumulation of storage on the wheat in the Chicago elevators. Some place it is as high as 50 cents per bushel. One of the largest elevator men in this city, speaking about it, said: "There are a few old receipts that have been lost or mislaid on which the storage is heavy, but the average is not over 15 cents per bushel." Those who suppose that the wheat for which those old receipts call is still here labor under a delusion; it was shipped out long ago. Should the wheat get out of condition in the summer the oldest receipts will be posted first."

OUR DULUTH LETTER.

We have had a very quiet wheat market the past month. No new features have developed themselves. The fluctuations have been confined to $3\frac{1}{4}$ cents. Close to-day at 92 $\frac{1}{2}$.

Receipts have been very light, only about 225,000 bushels, making the stock in store to-day 5,847,431 bushels.

Several firms have been shipping considerable low grade wheat from here to Chicago, and a great deal to interior milling points, also.

Flour in store, 82,250 barrels; receipts for the month, 5,700 barrels.

In addition to the private warehouses that have recently been built for the storage of flour, the St. Paul & Duluth R. R. Co. are busy constructing another one, which, when completed, will give the company a storage capacity of 130,000 barrels.

The Minneapolis & Omaha Railroad will also build some warehouses in the near future. The Produce Exchange are agitating the question of establishing a uniform system of grades for flour and conducting the trade upon the same principle as wheat. In order to do this they need the co-operation of the millers in Northwest Minnesota and Dakota.

Letters from quite a number of these millers have been received, favoring the scheme.

Considerable flour has and is now being received on consignment, but it has to be forwarded East and sold on its merits.

A little corn has come in during the past week. We now have in store about 25,000 bushels.

President Fisher, of the St. Paul & Duluth Road, when on a visit here last week, remarked in a conversation with a prominent wheat dealer, that 3,000,000 bushels of corn would have found a market at Duluth in 1885 if the elevator men of the city had been prepared to handle it. By next crop we shall have ample facilities for taking care of all the corn (or any other commodity) that will or ought to come to us.

Arthur, Waters & Co. (large Buffalo grain dealers who have recently established a branch house here) bought on Friday last 100,000 bushels of corn.

They intend to try and make this something of a coarse grain market.

The contracts for the Manitoba Railroad Company's elevator at West Superior have been awarded and work commenced. The combined capacity of the elevator and warehouse will be about 2,500,000 bushels. It is supposed that quite a number of our grain merchants are interested in this enterprise; they think it will be beneficial to the trade, inasmuch as it will not be under the Minnesota state laws, and the inspection controlled by the Board of Trade. The North Dakota Elevator Company has consolidated with the Sawyer system, with A. J. Sawyer as President and A. G. Chambers as general manager. The company have determined to build a dozen more elevators along the line of the Manitoba Railway.

Duluth, March 8, 1886.

PROBUS.

CHEAT.

Cheat will make its appearance in many wheat fields after the present severe winter, and many will believe that the wheat has been changed into cheat, forgetting that nature is always true to herself, and that such a change is impossible. The cheat seed gets mixed with the wheat and is sown with it. The difference between the close, narrow spike of wheat and the loose, diffusely branched panicle of cheat, or chess, is very great, and a change of one of these to the other would be a great violation of the laws of nature, and without a parallel in either the vegetable or animal kingdoms. Specimens have several times been sent to the Department of Agriculture, claiming to be wheat and cheat growing together on the same head, but on examination these proved to be merely a branch of cheat accidentally entangled in the spikelets of a wheat head. Specimens have also been sent claiming to be wheat and cheat growing on different stalks, but from the same root, yet a careful examination showed that the roots of the two plants were closely intermingled without any structural connection. It always happens that during a severe winter a quantity of wheat is destroyed, chiefly in low places subject to alternate freezing and thawing, by which the roots are broken and exposed by the process of "heaving." In such cases the cheat plants, being of a more hardy nature, are uninjured, and having the ground now to themselves, grow more vigorously, and "stool out" abundantly, so as to take full possession, and then we have a crop of cheat instead of wheat.

YEARS OF PLENTY AND STATE GRANARIES.

The present depression in the price of wheat is paralyzing English agriculture, and spreading, slowly but surely, commercial and political alarm. With the question of the English farmer's position we shall here have little to say, but the steady diminution in the acreage sown with wheat each autumn is calculated to create a feeling of anxiety deepening into dismay. In the first place, it is at the root of nearly all the outcry for protection, which we had at one time hoped to see die away, but which has now got hold of half the Chambers of Agriculture in the kingdom, and for all that sense or reason have hitherto had to say, is *not* losing ground. But in the second place, this gradual but unchecked abandonment of English wheat cultivation is developing, year by year, a small danger into a serious one. In fact, this danger has already attained to very considerable dimensions; and it grows yearly. What would happen to the corn markets in case of a war between England and any other great power? Sixteen million quarters out of twenty-four are imported from abroad, and the arrival of these sixteen millions might be placed in constant peril by a power with a fleet vastly smaller than our own. A sunken ship in the Suez Canal would send the price of Indian wheat up five shillings a quarter, while half a dozen Alabamas might paralyze the great Californian trade. At the present moment one and one-half million quarters of wheat are coming to us from vast distances, and on the due arrival of these quantities the present level of prices is based. A big war would at once send up prices ten, if not twenty, shillings per quarter on the question of freight and insurance alone, which if the enemy proved equal to doing any serious mischief, the rise in prices would almost inevitably be such as to cause the most terrible distress among the poor, no longer contemplating bread at ninepence or tenpence as a contingency, but assured in their own minds that they will always henceforth be able to procure it at half that price. Our present enormous dependence on foreign wheat-producing states is deplored as a danger by all the economists, nor can the historian be unaware that a similar dependence added vastly to the difficulties both of Athens and of Rome. But economists and historians alike put off the matter with the sad assurance that "it is inevitable." We, the English people, are six-and-thirty millions, and we do not eat less than four-and-twenty million quarters of wheat every year. Can four-and-twenty million quarters of wheat be grown within our shores? Can we raise our wheat acreage to seven millions when it is now a bare two and a half? The thing is impossible, say our advisers, and it will not pay to give it further discussion. Yes; the thing *is* impossible. At present prices an increased wheat acreage is out of the question. The protectionist dreamers, who

would fain tax American and Russian wheat, must needs let Canadian and Indian come in free. Their "protection" of the English farmer would be evanescent—the affair of a few years at best; the only interests which these schemes would permanently protect would be those of our Colonial and Indian fellow-subjects. But while we concede this, nor expect to see a seven million wheat acreage in the United Kingdom, are we absolutely compelled to accept as inevitable all these ills and all these dangers which are admitted to flow from the smallness of wheat reserves within our four seas? And to this last question we answer fearlessly that we are *not* so compelled; that provision can be made whereby these ills and dangers would be obviated altogether. The policy of Joseph may be deemed somewhat antiquated by this go-ahead age, but the old things renew themselves in strange ways, and the wisdom that came to Joseph in a dream may come to us, haply, with our eyes open. We, too, have been having our "years of plenty." Our receipts of wheat from all sources, during the past five years have been at the rate of 27,000,000 quarters per annum. Wheat has been fed to stock; has been squandered almost as sugar and salt is squandered, for very cheapness. And thus far, the plenty continues still. The January average for English wheat was 29s. 9d., and on the 20th of last month it was quoted at 29s. 4d., the lowest price of the century. Foreign wheat competes at the same price; now, emphatically, is the time to buy wheat.

And now therefore appears to be the time to ask, Why should not the government introduce state granaries, sufficient to assure the country one year's wheat supply against any contingency? Such granaries might store either sixteen million or even twenty-four million quarters that is, of a year's average imports, or of a year's total wants. The latter quantity, supplementing present production, would "make assurance doubly sure," but the former would be all that was absolutely necessary. From these granaries no wheat should be sold until the imperial average had reached a certain height, except indeed that the government officers might be authorized to make substitutions, selling out so many quarters of wheat and replacing them with an equal quantity of newer corn. This reserve would mean *absolute security to the nation in case of war*; it would mean moderate instead of panic prices on the markets; and it would give England that which in every emergency has been her one want—time. In a protracted struggle, English farmers would then have an opportunity to prepare. Millions of acres of pasture could be broken to the plow, and a wealth of nitrogen, stored up in the soil, yield us splendid crops of wheat exactly when most needed. — *The Miller, London, Eng.*

A REMEDY FOR SMUT.

Smut in wheat having become a rapidly growing calamity in this country, which causes a loss of millions of dollars to the crop every year, the general freight department of the Chicago & Northwestern Railroad did a good thing in issuing a circular which contains a cheap and perfect remedy for the above evil. It has been tried in thousands of cases, and never failed when properly applied. The prescription for killing the smut in seed wheat is simply this:

Dissolve one or two pounds (there is no danger of getting the solution too strong) of blue vitriol to each gallon of water. You must judge as to how many gallons of this solution you will require for the amount of seed you intend to sow. Probably one gallon will wet four bushels of seed. Put the seed wheat into coarse bags, about 50 or 60 pounds to the bag; tie them at the top so that the wheat will lie loosely in them; immerse them in this pickle and let them lie for five or ten minutes, turning the bags over a few times to be sure that the wheat has become thoroughly wet. Then lift them out and let the pickle drain back into the vessel that contains the solution. The wheat will very soon be in condition to sow. It does not require to be spread out to dry, as the wheat will absorb the moisture very quickly.

This method is in general use in Europe with the best of results to the crop. In preparing wheat for seed it is also the practice of farmers in Europe to separate the small and imperfect grains from the largest and most perfect berries, and sow only the latter, resulting in a larger yield and better quality. Farmers in Illinois and Iowa have made experiments to the same effect, which resulted so satisfactorily that they have adopted the above practice in selecting their seed wheat.

NOTES FROM THE EXCHANGES

Chief Grain Inspector R. H. Jenkins, of the Boston Chamber of Commerce, formerly of Chicago, has tendered his resignation to the committee on grain inspection, which refused to accept the resignation.

For the convenience of the operators on 'Change Col. E. P. Whitford, manager of the quotation department on the Chicago Board of Trade, has invented a mechanism, something like a clock, registering the leading options so that they can be clearly seen from a great distance.

There is a movement on foot to abolish the illegitimate trade in "privileges" after closing hours on the Chicago Board of Trade, as it is gradually strangling the life out of speculation. The only remedy thus far suggested is to amend the rules so as to make the traders subject to a heavy fine.

Members of the Chicago Board of Trade are anxious to re-establish an iron-clad commission rule. A petition was circulated to-day with a clause that provides for the expulsion of a member for doing business at less than the regular rates, and gives the member furnishing the proof \$2,500 reward.

In connection with the proposed sale of the Produce Exchange building at Toledo, Ohio, to a company, the rumor has been started that the grain trade is going to pieces there. Such a statement, says the secretary of the Exchange, is without the slightest foundation, as the trade there is as good, or better, than anywhere.

The Merchants' Exchange of Buffalo decided not to take up the proposition to build an elevator on the Lake Shore Road. A conference was held between A. Mackay, general freight agent of the Michigan Central, and the grain dealers. The road has been making heavy charges for transferring grain, beside exacting charges for demurrage on cars held. The dealers instructed their correspondents to ship by other roads than the Michigan Central, which brought Mr. Mackay down to look into the matter.

The suit of Edward S. Jenison vs. the Chicago Board of Trade for \$75,000 damages for violation of contract was on trial lately, when Jenison claimed to be the architect whose plans and specifications for the new Board of Trade building had been accepted, and that an arrangement had been made that the architect whose plans were accepted should be the supervisor of their execution. In some manner other plans were subsequently decided upon, yet many of Jenison's ideas were adopted and used in constructing the building. Counsel for the plaintiff asked that at least a remuneration for such of his plans as were accepted and used be awarded. But the court decided adversely.

Members of Boards of Trade and others manifest a great interest in the recent decision of the United States Supreme Court in the case of Higgins & Gilbert, commission merchants of this city, vs. James McCrea, of Cleveland, Ohio, for losses sustained in provision trades in 1883, before the McGeoch failure. The court reversed the decision of the United States Circuit Court, at Cleveland, in favor of McCrea, and rendered a verdict for \$31,000 in favor of Higgins & Gilbert. The vital part of the decision is that it sanctions the system of "ringing up" trades and substituting other parties to make settlements when necessary. Members of the Board have always claimed that the system was right, and the court's decision elates them.

Harlan H. Peck, a grain and commission merchant doing business in Chicago and Kansas City, has filed a bill of injunction in the Circuit Court at Chicago against the Chicago Board of Trade and the Western Union Telegraph Company, to restrain the defendants from discriminating against him by cutting off, diverting, withholding, or in any other way interfering with the supply of market information from any of his places of business for the only reason that he refuses to take out a membership in the Board. It is alleged by complainant that the Board of Trade and the telegraph company have entered into collusion for the purpose of cutting off all market reports which have heretofore been disseminated by means of "tickers," thus discriminating against dealers and brokers who shall refuse to pay a large sum for a membership in the Board.

The annual report of the Detroit (Mich.) Board of Trade, which was presented to the Board by Secretary Lane on March 10, makes a pretty good showing in regard to the business transacted during the year. The receipts of wheat during the seven months ended Feb. 28, 1886, amounted to 7,070,342 bushels, against 4,191,305 bushels during the same period of 1883-'84. The receipts of corn for the last four months of the year ended Feb. 28 were about 2,000,000 bushels, against 1,192,000 bushels a year ago and 1,056,341 bushels two years since. Of oats, 863,671 bushels have arrived from Aug. 1, 1885, to Feb. 28, 1886, against 824,660 bushels for the same period a year ago. The increase of the grain receipts has chiefly been aided by the Wabash Road, which, though opened only four years ago, this year shipped into Detroit 2,250,000 bushels of wheat, 2,707,000 bushels of corn, and 620,000 bushels of oats. Among the more

important subjects brought before the board of directors for consideration was the matter of the discriminating and unreasonable charges made by the Michigan Central for switching to and from its elevators cars bound for Grand Trunk lines. The President of the Board for the ensuing year is Mr. Lichtenberg, Mr. Lasier retiring from the office.

The committee of the Chicago Board of Trade to whom the statements of the Board of Real Estate Managers and the Real Estate Committee for last year were referred has prepared its report, recommending for approval the final accounts of the Real Estate Managers and the adoption of the reports. The original estimate of the total cost of erecting the Board of Trade building was only \$500,000, from which it was expected to derive a net income of \$40,000, or an 8 per cent. annual dividend. After a large sum of money had been expended, it was stated at the annual meeting of the association, held Jan. 15, 1883, that "under the present plans for the new building and estimates of cost a larger expenditure would be necessary; but that the managers felt confident that the whole cost of the building would not exceed \$1,300,000." However, the final reports showed a total cost of about \$1,725,000, and while the committee recommends the adoption of the reports, "because the expenditures in 1885 were for the most part necessary for the completion of the building," it censures the Board of Real Estate Managers for failing to obtain correct estimates of the cost of building at the very outset. Besides, the Real Estate Managers should have submitted printed reports to the members of the association a few days before each annual meeting, whereby they would have been given an opportunity to examine them carefully before the meetings, and call for changes in the plans in the interest of economy.

STOCKS OF WHEAT AND CORN.

[From the *Cincinnati Price Current* of March 11.]

In pursuance of previous custom, the *Cincinnati Price Current* has made a special investigation through its large list of correspondents in regard to stocks of wheat and corn remaining unmarketed on March 1, on farms and in mil's and local warehouses, in the Western states, the result of which is herewith submitted, with incidental information which may be of interest in this connection.

In a preliminary way, we will submit a statement compiled from Department of Agriculture reports showing the annual production of wheat in the several states covered by our special inquiries, for a period of six years, with aggregates, as follows, in bushels:

	1885.	1884.	1883.
Ohio.....	20,593,000	41,186,000	25,884,000
Indiana.....	26,659,000	33,745,000	28,447,800
Illinois.....	10,683,000	32,374,000	22,150,000
Missouri.....	11,275,000	27,500,000	23,819,300
Kansas.....	11,197,000	34,990,000	26,851,100
Michigan.....	31,261,000	29,772,000	25,011,000
Kentucky.....	3,759,000	13,425,000	9,612,600
Tennessee.....	3,821,000	9,320,000	7,408,800
Minnesota.....	34,385,000	41,307,000	33,773,300
Iowa.....	30,333,000	31,270,000	27,518,500
Nebraska.....	19,835,000	28,325,000	27,481,300
Dakota.....	27,912,000	24,330,000	16,128,000
Wisconsin.....	15,665,000	20,083,000	19,604,900
Total.....	247,271,000	365,627,000	298,690,800
Other States and Territories..	109,841,000	147,136,900	126,463,700
Total crops.....	357,112,000	512,763,900	425,154,500

The thirteen states mentioned (Dakota inclusive) represented 69 1/4 per cent. of the entire crop in 1885, 71 1/4 per cent. in 1884, 70 per cent. in 1883, 73 1/2 per cent. in 1882, 70 per cent. in 1881, and 74 per cent. in 1880.

Our returns in regard to stocks of wheat held on March 1 by farmers and millers, and in local warehouses, exclusive of what is currently reported as "visible supply," indicating the proportion of the last crop thus unmarketed, show the following averages and results, by states:

	Percentage.	Stocks.
Ohio.....	28	5,800,000
Indiana.....	26	6,900,000
Illinois.....	21	2,900,000
Missouri.....	22	2,500,000
Kansas.....	25	2,800,000
Michigan.....	37	11,500,000
Kentucky.....	15	600,000
Tennessee.....	15	500,000
Minnesota.....	39	13,400,000
Iowa.....	30	9,100,000
Nebraska.....	40	7,900,000
Dakota.....	26	7,200,000
Wisconsin.....	38	5,900,000
Total.....	31	77,000,000

These states held a total of 115,000,000 bushels a year

ago, according to our similar investigations—the present showing indicating a decrease of 38,000,000 bushels.

In regard to other portions of the country. We submit the following approximations of stocks, with the production in 1885, in bushels:

	Crop, 1885.	Per-centage.	Stocks.
Southern States (except two)....	24,323,000	30	4,900,000
Middle and Northeastern States..	27,430,000	25	6,800,000
Pacific States and Territories....	49,177,000	45	22,100,000
Other Territories.....	8,921,000	25	2,200,000
Total.....	109,841,000	33	36,000,000

Stocks a year ago in the states and territories embraced in the above exhibit were 47,000,000 bushels, according to our estimates then made—indicating a decrease this season of 11,000,000 bushels.

The aggregate production of wheat in 1885, and stocks unmarketed on March 1, 1886, in the divisions of the country above indicated, are shown in the following, in bushels:

	Production, 1885.	Farmers' Stock, March 1, 1886.
Thirteen States.....	247,271,000	77,000,000
Other States, etc.....	109,841,000	36,000,000
Total.....	357,112,000	113,000,000

This exhibit implies that the present stocks of wheat in the country, exclusive of the reported visible supply, are equal to about 31 1/2 per cent. of the last crop—which compares with an equal percentage a year ago of the larger production in 1884.

The following table shows the total of farmers' stocks of wheat on March 1, 1886, according to investigations of the *Cincinnati Price Current*, with the reported visible supply, and aggregate, compared with the farmers' stocks on March 1 of previous years, according to Department of Agriculture reports, and visible supply at corresponding dates, with aggregates, in bushels:

	Farmers' Stock.	Visible Supply.	Aggregate.
1886.....	113,000,000	52,000,000	165,000,000
1885.....	109,000,000	43,000,000	152,000,000
1884.....	119,000,000	31,000,000	150,000,000
1883.....	143,000,000	23,000,000	166,000,000
1882.....	98,000,000	17,000,000	115,000,000
1881.....	145,000,000	26,000,000	171,000,000

This showing of estimated stocks of wheat in the country, 165,000,000 bushels, including visible supply, is 47,000,000 bushels less than a year ago, and equal to an average for the five years previously, including the large supply a year ago.

The quantity of wheat on passage to Europe compares with previous years as follows:

	Bushels.
1886.....	18,410,000
1885.....	23,320,000
1884.....	18,880,000
1883.....	21,400,000
1882.....	30,550,000
1881.....	23,600,000

It may be interesting to make a comparison of these results with the exhibits which have been previously offered by the *Price Current* as to available stocks of wheat and flour in the country, based on data of production, exports and estimated domestic consumption. We have given 224,000,000 bushels as the available supply on Jan. 1 (in excess of estimated unavailable reserves, corresponding with the situation of low supplies July 1, 1882), after deducting for spring seeding requirements, this quantity including flour. To bring the statement down to March 1, there should be deducted for domestic consumption for two months, 46,000,000 bushels, and for exports, say 13,000,000 bushels, making 59,000,000 bushels, which gives 165,000,000 bushels as the result for March 1. This quantity exactly corresponds with the present exhibit as to stocks of wheat only, the latter embracing all wheat, exclusive of flour, the other including flour, but being a quantity in excess of estimated "unavailable" stocks. Whatever variation there may be, therefore, in the two exhibits, is the difference there may be in the quantity of wheat in the form of flour, and wheat in transit, in the country, against the estimated quantity represented as unavailable reserves. This difference can not be great, so the two exhibits practically approximate each other closely. If the flour in the entire country be reckoned as equivalent to 35,000,000 bushels of wheat, and no allowance be made for wheat in transit, the comparison would be as follows:

Farmers' stocks.....	113,000,000
Visible supply.....	52,000,000
Flour, as wheat.....	35,000,000
Total.....	200,000,000

Against the estimate based on reported production, exports and domestic consumption, as follows:

Wheat and flour, available stocks.....	165,000,000
Estimated unavailable reserves.....	50,000,000
Total.....	215,000,000

The domestic requirements of wheat and flour from March 1 to July 1, four months, will be about 94,000,000 bushels—against which the supply indicated by the estimated stocks of wheat, with the visible supply and estimated supply of flour, making 200,000,000 bushels, after deducting 50,000,000 bushels as "unavailable," leaves 150,000,000 to meet these requirements and the export movement—which implies that stocks will be well reduced by the next harvest, but not to so low a point as in 1882. If the exports should be 26,000,000 bushels for the coming four months, the total distribu-

tion would be 120,000,000 bushels, leaving 30,000,000 bushels as an amount for reserves in excess of the 1882 point.

Another view of the case may be taken. The indications herein submitted are that total stocks are about 50,000,000 bushels less than a year ago, for the entire country. Last year the exports for the four months to July 1 were 31,000,000 bushels. If the exports should not exceed last year (and they are not likely to), with domestic consumption practically the same, the situation indicated for July 1 will be simply that of 50,000,000 bushels less than at corresponding time last year, when the supply was undoubtedly 95,000,000 bushels greater than at corresponding time in 1882. The situation justifies the belief that stocks of wheat and flour in the country on July 1, 1886, will be but little if any smaller than at corresponding time in 1884.

STOCKS OF CORN.

Our inquiries in regard to stocks of corn remaining unmarketed and unconsumed on March 1 cover twelve states, the production in which in 1885 represented nearly 77 per cent. of the entire crop of the country. The following table, representing millions of bushels, shows the production in these twelve states during the past seven years, according to reports of the Department of Agriculture, and census report for 1879:

	Millions of Bushels.							
	1885	1884	1883	1882	1881	1880	1879	
Ohio.....	112	85	74	98	80	120	112	
Indiana.....	132	105	96	108	80	99	115	
Illinois.....	269	244	204	182	177	240	326	
Iowa.....	242	253	170	176	173	260	275	
Missouri.....	197	198	162	170	98	160	203	
Kansas.....	158	168	173	144	76	106	106	
Nebraska.....	129	122	101	82	59	61	65	
Minnesota.....	18	24	15	21	16	16	15	
Wisconsin.....	83	26	23	32	29	34	34	
Michigan.....	81	26	21	29	25	35	32	
Kentucky.....	90	72	78	76	52	86	73	
Tennessee.....	76	68	64	75	56	62	63	
Twelve Western States.....	1487	1389	1181	1188	896	1278	1419	

Twelve Southern States.....	334	296	284	335	218	319	235
Four Middle States.....	84	81	69	79	65	104	37
Six New England States.....	9	8	8	6	7	8	8
Other States and Territories.....	22	21	9	9	9	8	5

Four divisions.....	449	406	370	420	299	439	335
Total crop.....	1936	1795	1551	1617	1195	1717	1754

Acres, millions.....	73.1	69.7	68.3	65.7	64.2	62.8	62.4
Average yield per acre.....	26.5	25.7	22.7	24.6	18.6	27.5	28.1

The proportion of the last corn crop remaining unmarketed on March 1, according to our special investigations in the states mentioned, and estimates for other portions of the country, is shown in the following:

	Percentage.	Stocks.
Ohio.....	44	49,300,000
Indiana.....	43	56,800,000
Illinois.....	46	123,700,000
Iowa.....	42	101,700,000
Missouri.....	36	71,000,000
Kansas.....	45	71,000,000
Nebraska.....	62	80,000,000
Minnesota.....	30	5,400,000
Wisconsin.....	38	10,900,000
Michigan.....	40	12,400,000
Kentucky.....	36	22,400,000
Tennessee.....	53	40,300,000
Twelve States.....	44	655,000,000
Other States and Territories.....	35	167,000,000
Total.....	42	812,000,000

Our similar exhibit a year ago showed 556,000,000 bushels for the twelve states, and 698,000,000 bushels for the entire country—the latter comparing with 675,000,000 as the estimate of the Department of Agriculture, for similar stocks on March 1; 512,000,000 in 1884, and 587,000,000 in 1883. Compared with the *Price Current's* figures last year, there is a gain of 99,000,000 bushels in the twelve states, 15,000,000 bushels in other portions of the country, or 114,000,000 bushels for the entire country.

While the quantity of corn is evidently larger than usual, for late years, much of the supply is poor in quality.

About 6 per cent. of the annual production of corn is disposed of by exports and by manufacture of liquor, 94 per cent. consumed for food purposes, feeding to animals, seedling, etc.

IT ALTERED THE CASE.

Minister (to deacon of the church)—"I want to refer to a matter, my dear deacon, that has been preying on my mind for some time. I am sure you will overlook any apparent meddling in your affairs, knowing that I only speak for your own good."

Deacon (cordially)—"Certainly, my dear sir, speak your mind freely."

Minister—"I understand you have been speculating a good deal of late. Now, aside from the danger of such a business and the consequent misery it may entail upon your family, do you consider it just the proper thing for a deacon of the—"

Deacon—"Yes. I admit that I have speculated some. I cleared \$5,000 only yesterday on a wheat transaction."

Minister (astounded)—"No, is that so? What's wheat worth to-day?"

There are 14,856,669 bushels of wheat stored in the Chicago elevators.



Scotland, Dak., is to have an oil mill.

A farmers' elevator will be built at Ardoch, Dak.

Dundee, Mich., is anxious to get a grain elevator.

A farmers' elevator will be built at Litchfield, Minn.

Elk Point, Dak., has 60,000 bushels of corn in cribs.

William Walker has sold his elevator at Lawrence, Kan.

Barrie, Ont., Canada, will soon have a new grain elevator.

W. N. Thorne has sold out his grain business at Den- nis, Kan.

Templeton & Sheridan, grain dealers, Packwood, Iowa, have dissolved.

J. W. Boyle & Co., grain dealers, of Cleburne, Tex., have dissolved.

Work has been begun on the new Manitoba elevator at Duluth, Minn.

Bullard & Adkisson contemplate erecting an elevator at Waxahochie, Tex.

Pearce's elevator at Topeka, Ill., is about ready for the handling of grain.

Lewis Van Ness & Co., grain dealers of Mendon, Mich., have failed for \$72,000.

Jacobs & Brower are about building a 15,000-bushel elevator at San Jose, Ill.

A representative of a Chicago bucket-shop has been arrested for stealing \$200 in Indiana.

Girton & Co., proprietors of the elevator at Shelbyville, Ind., have dissolved.

Bryant & McCampbell, grain commission merchants, of this city, have dissolved.

Wheat has been coming in rapidly at Owatonna, Minn., for some time past.

Campbell & Bros., of Charleston, Tenn., paid out \$30,000 for grain in thirty days.

Fred. Aberle, of Alexandria, Minn., has purchased the brewery at Wahpeton, Dak.

The brewery at Waseca, Minn., has been purchased by Wm. Kleeman, of Janesville.

Davis & Brumbrock, proprietors of the elevator at Beatrice, Neb., have dissolved.

The new Farmers' elevator at Park River, Dak., is to have a capacity of 60,000 bushels.

Gaines & Harber, commission men of Bloomington, Ill., have failed, with \$2,000 liabilities.

Geo. Cooper's warehouse, at Irving, Ore., has burned, with 7,000 bushels of wheat. Loss, \$10,000.

Two elevators of 1,700,000 bushels' capacity each will be built at West Superior, Minn., this season.

The exports of wheat from all the California ports from Feb. 1 to Feb. 17 were 3,600,000 bushels.

Schwerzgen, Kahle & Co., grain commission merchants, of this city, have dissolved partnership.

M. Warner, Algona, Iowa, has purchased of Geo. L. Jarrett, Des Moines, Iowa, an engine and boiler.

Gilchrist, Thomson & Co. succeed Gilchrist, Patterson & Co., grain and lumber dealers, at Earlham, Iowa.

The Polar Star Mill Co., of Fairbault, Minn., will build a 50,000-bushel elevator near their mill in the spring.

A grain elevator at Ridgeway, Mich., is being talked of. Plans and specifications have already been submitted.

The farmers of two or three counties around Plankington, Dak., are arranging to build an elevator at that point.

E. A. Brown, of Ash Creek, Minn., has purchased the grain and feed business of Roderick & Carpenter at that place.

Being dissatisfied with the grain market, the farmers of Madelia, Minn., are about organizing a Farmers' Alliance.

The grain men of Sutherland, Iowa, during the six months ended Feb. 15, 1886, shipped 457 cars of stock and grain.

The mills and elevators at Hastings, Minn., receive about ten carloads of wheat daily from points on the H. & D. Road.

E. Kent & Co., of Clinton, have disposed of their interest in the grain business at Wapella, Ill., to J. Butterworth & Co.

J. L. Patton, Kellogg, Iowa, has added a six-inch conveyor to his elevator, furnished by Geo. L. Jarrett, Des Moines, Iowa.

J. A. McLennan, contractor of the West Superior, Wis., elevator, is now on the ground, and pushing the work as fast as possible.

Leading business men of Hastings, Minn., contemplate the organization of a wheat buying syndicate for the purpose of making the prices agree as near as possible

with those in larger markets. In connection with this project the organization of a Board of Trade is being talked of.

The railway elevator which was burned lately at Grand Haven, Mich., will not be rebuilt, as it is not needed for lack of business.

The Northern Pacific Elevator Company will build several new elevators along the line of its road in Montana this season.

The Manitoba Railroad will build two elevators at Superior, Wis., in the spring, with a total capacity of 3,250,000 bushels.

Farmers in the vicinity of St. Olaf, Dak., are about to organize a co-operative company for the purchase and shipment of grain.

Jacob K. Horner has withdrawn from the firm of Horner & Kay, grain dealers, at Philadelphia, Pa. Kay & Horner continue.

A Farmers' Joint Stock Elevator Company has been organized at Elmira, Dak. The elevator will have a capacity of 75,000 bushels.

C. Scoble, of Elberon, Iowa, has ordered a corn cleaner, corn sheller, belting, buckets, link belt, etc., of Geo. L. Jarrett, Des Moines, Iowa.

W. R. Manning, Newton, Iowa, has added over 100 feet of six-inch iron conveyor to his elevator, purchased of Geo. L. Jarrett, Des Moines, Iowa.

The farmers of the Jim River Valley will meet at Aberdeen, Dak., on May 11, to form an association for the co-operative handling of grain.

The Elevator and Farm Produce Co. has been incorporated at Sauk City, Wis., by J. J. Heller, C. Knoni, C. Abrecht, P. Lachmund, and others.

Charles H. Carpenter, of the firm of Carpenter & Co., grain buyers and shippers at Joliet, Ill., was married to Miss Carrie R. Ashley, on March 9.

The Winona (Minn.) Elevator Company reports an increase of business, the receipts of grain having averaged twenty carloads daily for some time past.

J. F. Heimer, of Des Moines, Iowa, has added considerable machinery to his oil mill, which was furnished and set up by Geo. L. Jarrett, of Des Moines.

The farmers and business men of Pelican Rapids, Minn., have organized a wheat association and elevator company. The elevator will be built at once.

The first barley ever shipped from Montana was sent by Col. Ferris to Milwaukee. He paid 55 cents a hundred for freight, and yet he made a good profit.

The Iowa Elevator Co., Des Moines, Iowa, have added ear-corn drags, belts, pulleys, shafting, etc., to their house, furnished by Geo. L. Jarrett, of the same place.

The farmers in the Jim River Valley, Dakota, will meet at Aberdeen May 11, for the purpose of forming an organization to lessen the cost of handling their grain.

G. B. Stocks & Son, of Blue Rapids, Kan., are building a very complete 30,000-bushel elevator. W. G. Adams, of Sandwich, Ill., is furnishing the complete outfit.

The two elevators at Flandreau, Dak., were in the hands of the sheriff for a few days, and the elevator men were very wroth, as they had ample means to satisfy any claim.

Since the elevators have withdrawn their buyers from the streets at Sleepy Eye, Minn., the farmers claim the price paid for grain is not so large as in neighboring towns.

Considerable quantities of grain are coming in at Fairbault, Minn., No. 1 selling at 75 cents, No. 2 at 67 cents, No. 1 Northern at 62 cents, and No. 2 Northern at 57 cents.

Grain shipments from Newport News to France have been inaugurated, and it is thought a large portion of grain heretofore sent to New York will in future go via the new route.

In the case of E. T. Wilder, assignee of the Minneapolis Elevator Company vs. M. J. Barry, at Red Wing, Minn., judgment has been entered for the former to the amount of \$254.20.

The Adair Elevator Co., Adair, Iowa, have purchased elevator heads, boots, belting, horse power, shafting, pulleys, etc., of Geo. L. Jarrett, Des Moines, Iowa, for their new elevator.

R. James Abernathy furnished plans and specifications and sold to White & Co., Pierce City, Mo., the Barnard & Leas Shellers, cleaners, and machinery for a 20,000-bushel elevator.

Dealers in barley at Milwaukee, Wis., are talking of forming a protective association with the view of employing men to discover infractions of the state law against fumigating barley.

Franklin Baker and James H. and Clarence I. Harper have formed a copartnership under the firm name of Baker, Harper & Co., as flour and grain commission merchants, at Philadelphia, Pa.

The Liberty, Neb., Journal says: From reports from the different grain buyers of Liberty we learn that there were 1,000 loads of corn taken in in four days last week—an average of 250 loads per day. If there is a town in the West of 1,000 inhabitants that can make a better showing, we would like to have them stand up. Liberty is in the heart of one of the finest agricultural sections of

country in the West, and but a very small portion of the corn crop has yet been marketed, so that this rate of delivering could be kept up for some time yet.

Geo. L. Jarrett, Des Moines, Iowa, has sold to Johnson Bros., Gilmore City, same state, a horse power, shafting, pulleys, boxes, belts, sprocket wheels, link belt, belting, buckets, etc., for their new elevator.

Carr & Brown, millers at Hamilton, Ohio, have just put in one of the "Coker & Metcalf" Steam Power Shovels, for unloading wheat. The shovel was furnished by the Webster & Comstock Mfg. Co., of this city.

The grain firms of Mt. Pulaski, Ill., last month were holding in elevators and cribs 200,000 bushels of corn; 1,500 bushels of wheat. The Latham (Ill.) elevators and cribs contained at the time 100,000 bushels of corn.

A wealthy lady living near Deersville, Harrison Co., Ohio, hid \$500 in bills in a pile of wheat, thinking it a safe place. The mice found it and nibbled it so that she was not able to realize a cent on the whole amount.

It is stated that the Farmers' Elevator at Milbank, Dak., recently sold on a mortgage, was not sold for want of success, but because the ex-treasurer was not in position to protect his paper. The elevator was purchased by Pratt & Co.

Arthur & Waters, grain commission merchants of Buffalo, N. Y., have established a house at Duluth, Minn. The Duluth firm, which is composed of C. H. Arthur, H. S. Waters, and C. H. Modisette, will be known as Arthur, Waters & Co.

The 1,000,000-bushel elevator just erected at Washburn, Wis., by the C. & N. W. Ry. Co., is supplied with the Coker & Metcalf Steam Power Shovels and the Macdonald Friction Clutch, both manufactured by the Webster & Comstock Mfg. Co., of Chicago.

There being a difference of several cents in the elevator and mill prices of wheat at Huron, Dak., the leading men of that place contemplate forming a wheat-buying syndicate for the purpose of making prices consistently near those of the large markets.

The Equitable Grain and Stock Exchange of Chicago, Ill., has filed articles of incorporation with the Secretary of State, to buy, sell, and deal in grain, provisions, railroad and other stock. The capital stock is \$100,000, and the incorporators are Charles W. Vance, W. B. Thorne, Jr., and D. P. M. Mason.

F. H. Peavy & Co., of Minneapolis, Minn., will erect a grain elevator in that city this year, to have a capacity of 2,500,000 bushels, thus making it the largest in the country. It will be completed about Sept. 15. The firm has also leased the new elevator at Washburn, Dak., which has a capacity of 900,000 bushels.

H. Sandmeyer & Co., of Peoria, Ill., issue a circular describing their bifurcated grain spout, and calling attention to their flexible grain spout for trimming cars, and also give price list of elevator buckets, while at the same time they call attention incidentally to their cornice shop as one of the largest in the state.

The Newton Milling and Elevator Co. has been organized at Newton, Kan., to succeed Dave Hamil. B. Warkenstin, formerly manager for C. Eisenmayer & Co., at Halstead, Kan., is president, manager and treasurer; David Goerz, vice-president; C. R. McLain, secretary; S. Lehmann and Jacob Linn, directors. W. A. Barke-meyer, also with C. Eisenmayer & Co., is associated with this company.

The people of Stillwater, Minn., were jubilant when it was stated a short time ago that a Chicago man had arrived in town to buy wheat in competition with the local mills. For a short time after the bridge was made free one man entered the wheat buying business in opposition to the mills. This, it is claimed, brought a great amount of business from Wisconsin. When that man left the field, however, the mills dropped the price two cents below the market price, and people complain that the wheat business has been dull ever since.

A new elevator is to be built at Buffalo, N. Y. The location selected will admit receipts from all railroads entering the west side of the city and deliveries to all Eastern roads and switches on the east side of the city. It is to have a capacity of about half a million bushels, and the cost is expected to be about \$150,000. It is thought probable that the Grand Trunk and Michigan Central Roads will favor the project. Barley dealers and shippers would be particularly benefited by the elevator, in which could be stored a large amount of the grain destined for other cities, instead of lying on the track.

To the large traffic in grain and to the perseverance of the men who have devoted their energy and business capacity to bring it to its present enormous proportions is due in a great measure the position that Chicago has occupied as the grain center of the world. The facilities for storing the great bulk of the grain arriving in this market have always been unrivaled by any other city. Foremost among our large elevators stand the Chicago & Pacific elevators, known as Pacific "A" and "B," located corner of North Branch and Haines street. Mr. William H. Harper, the founder of this extensive company, is a native of Indiana, but since the Civil War, in which he served with distinction, has made Chicago his home. He was appointed Chief Grain Inspector by the government in 1872. In 1875 he entered into contract with the Milwaukee & St. Paul Railroad, and built the elevator known as the Pacific "A" on that line. Elected to the Legislature in 1882, his name has become famous as the

originator of the Harper High License law. In 1881 Mr. Harper sold half his interest in Elevator "A" to Mr. A. Taylor, and the present company have lately constructed Pacific Elevator "B." These elevators are among the largest in Chicago, Elevator "A" having a capacity of 800,000 and "B" 1,000,000 bushels of wheat, both being fitted up with all the new appliances and improved machinery necessary to the carrying on of their large business with the utmost dispatch.

The receipts of grain at Peoria, Ill., during February amounted to 2,054,815 bushels, viz.: Wheat, 21,500 bushels; corn, 1,061,510 bushels; oats, 886,905 bushels; rye, 25,000 bushels; barley, 60,000 bushels. During the same month in 1885 the receipts of grain were 1,984,290 bushels, showing an increase this year of 70,525 bushels. The shipments for the same month aggregated 1,522,345 bushels, divided as follows: Wheat, 19,350 bushels; corn, 648,390 bushels; oats, 832,140 bushels; rye, 10,500 bushels; barley, 11,935 bushels. The increase over the shipments of the corresponding month of last year aggregated 238,485 bushels.

An Atchison, Kan., paper of the 13th inst. says: "The Atchison Board of Trade struck a blow for Atchison yesterday in the resolutions adopted protesting against the discrimination on the part of the Missouri Pacific Railroad against the grain trade of Atchison that, had it never done anything more, would be a vindication for its existence, justify every expense that has been incurred in its maintenance, and entitled it to the thanks of every citizen. It is not worth while for the Missouri Pacific officials to make general disclaimers and lofty assertions that the charges preferred are not true. It is in the air, and the fact has been recognized for some time. Geographically, Atchison has advantages as a grain point over neighboring towns, and here that business centered. There are no natural reasons why that trade should be diverted, and other causes have operated to deprive Atchison of it. It is to be hoped that the inquiry into the matter will right the wrong."

The Planter and Stockman, of St. Louis, publishes a very full report of the condition of the wheat crop in the entire winter wheat belt, the information being derived from a very large number of reliable correspondents. The acreage is nearly the same as last year. As to the present condition, Tennessee reports the plant stood the winter well. In Kentucky, the plant is growing; the heavy snows of February were very favorable, and under good conditions an average crop is looked for. In Michigan wheat went into the winter in a poor condition, and, on account of bad weather and little snow, much of the plant has been seriously injured. Indiana has also experienced very changeable weather for the past month, which has injured the plant to some extent, and the prospect for a full crop is poor. The outlook is about the same in Ohio. Kansas reports are conflicting, and the prospects are only fair. In Missouri the outlook is favorable, and with no decided change for the worse before April, there will be an average crop. Illinois makes an exhibit much like Kansas. The condition differs greatly according to locality, and only under unusually favorable circumstances can there be more than a three-fourths crop. From the Pacific Coast all correspondents agree that while the crop is not so far advanced as last year, prospects now are excellent. Old wheat has generally gone out of farmers' hands, and shipments to Europe are large.

Cleaning wheat is declared by Fred Cramer, a Minnesota grower, to be unprofitable. He communicates his ideas to the Mankato Review, a Minnesota journal, writing from Beauford in that state as follows: "Experience teaches me that it don't pay to clean wheat for the market at present. To prove my assertion I wish to state a couple of facts. I have some wheat raised on shares, a neighbor has half and I the other half. The neighbor hauled his wheat to Mankato without cleaning it and received No. 2 price, being docked 1½ pounds on the bushel. Some of the very same wheat I cleaned and screened out 3¾ pounds per bushel, and when I got it to Mankato I received No. 2 price and one pound off. Now for the comparison: 60 bushels uncleaned at 70 cents per bushel would bring \$42.00, the same wheat cleaned would bring \$38.73, in addition the screenings are worth \$1.10, total, \$39.83, which leaves \$1.12 in favor of uncleaned wheat on every 60 bushels. Of course I saved hauling the 3¾ bushels of screenings to market, but to offset that my neighbor saved cleaning his 60 bushels. Another case: Last fall I had the privilege of sending a couple of loads of wheat for a non-resident, from a neighboring farm, right from the threshing machine, to Good Thunder. The wheat was about the poorest dry wheat I ever saw, it was taken for No. 2 with two pounds off. I thought the non-resident was lucky that time sure. When I went to sell that wheat I took some of my own wheat along, which, according to the best of my judgment, was one grade better, besides it was cleaned when I got there. I was offered just the same as the non-resident got, but another buyer raised the first one's offer a very trifle and took the wheat. A Mapleton buyer was present, looked at the wheat, but, of course, made no offer. A few days later I took a load of the very same wheat, cleaned just the same, to the same Mapleton buyer. He said, 'Those Good Thunder buyers gave you too good a grade, I can only take your wheat for No. 2 by docking three pounds per bushel.' In no case could I complain of unjust grade, because from the effect of those very hot days about harvest time, nearly all our last year's wheat is very light, nor do I remember of ever marketing a load of wheat without getting as good a grade as my wheat merited."



The Corn Exchange and Board of Trade, of Montreal, have appointed deputations to visit Ottawa with the Toronto Board of Trade with a petition to the government to reduce the canal tolls the coming season. The deputation leaves to-night or in the morning.

The reports of chief of engineers Newton and Maj. Hardbury on the Hennepin Canal have been transmitted to the House of Representatives at Washington. Maj. Hardbury recommends what is known as the Marais d'Ozier route, claiming that the cost of the canal by this route would be about \$1,000,000 less than by the other route surveyed; besides, Maj. Hardbury says, it affords a better supply of water than all the other routes surveyed. Gen. Newton, on the other hand, adheres to the Rock Island route, which, he says, offers the greatest commercial advantages.

The St. Louis Journal of Agriculture comments as follows: One thousand eight hundred dollars will go into \$178,000 ninety-eight and eight-ninths times, very nearly one hundred times. That is, for 27,000 tons of grain, or other produce, to be shipped from St. Louis to New Orleans, it will cost the farmers one hundred times as much if shipped by rail, as if shipped by water. The moral of this is: Give us all the water competition that it is possible to have. As low as the prices of produce are in the East, they are so much above those of the West that if the farmers of the West could get as much for their farm products they would be comparatively well satisfied. There is but one way to approximately accomplish this, and that is to cheapen freights.

A saving of one-half a cent per bushel on our exports of breadstuffs last year would have amounted to \$1,000,000. By improvements in New York harbor alone, according to statements made before a committee of the House of Representatives on Friday, such a saving could annually be effected. At the present time it appears, owing to the danger of grounding in the harbor, the largest steamers are unable to load to their full capacity. It costs just as much for a vessel to cross the ocean with a partial load as with a full one; hence, if it could load to its full capacity, rates would be that much lower. It is clearly to the interest of all sections of the country, therefore, that that harbor be so improved that the largest vessels can load to their full capacity without being delayed for higher water or incurring the danger of grounding.

At the annual meeting of the Lake Carriers' Association at Buffalo, N. Y., which was held on March 10, the following board of managers was elected: President, S. D. Caldwell, Buffalo; Vice-President, James Ash, Buffalo; Vice-President of Erie, F. J. Firth; Vice-President of Detroit, James Millen; Vice-President of Chicago, W. W. Eagan; Secretary, Francis Almy, Buffalo; Treasurer, James Carey Evans, Buffalo. Managers, Thomas Martin, Oswego; W. Bullard, Buffalo; W. P. Henry, Buffalo; David Donaldson, Buffalo; E. T. Evans, Buffalo; Thomas Wilson, Cleveland, Ohio; M. Bradley, Cleveland, Ohio; H. M. Hanna, Cleveland, Ohio; A. W. Colton, Toledo, Ohio; Eber Ward, Detroit, Mich.; James Davidson, Bay City, Mich.; Joseph Ansirian, Chicago, Ill.; Ira H. Owen, Chicago, Ill.; R. P. Fitzgerald, Milwaukee, Wis.; David Vance, Milwaukee, Wis.; Alexander McDougall, Duluth, Minn.

In 1830 the maximum draught of ocean vessels was 18 feet; in 1850 it was 23 feet, now it is 28 feet, showing that there is a gradual increase in the size of vessels. It is essential that the channel of New York Harbor should be deepened to meet the requirements of this situation. Wise statesmanship demands the use of every means to cheapen transportation. In the production of grain we are meeting with strong competition from India. Even with present defective methods wheat is produced in India at from 8 to 9 cents a bushel, while in Dakota the cost, owing to the higher price of labor, is 19 cents. In 1870 India exported only 145,988 bushels of wheat, while last year it exported about 45,000,000 bushels. With such a competitor in the field it is obvious that the United States must neglect in no way to cheapen transportation. That can be done best by a liberal improvement in New York Harbor, and by deepening and widening the Erie Canal. Their influence as regulators of the transportation charges of the entire country is beyond dispute.

The Committee on Railways and Canals in the House of Representatives at Washington has favorably reported on the bill providing for the construction of Maryland and Delaware free ship canal, which is to be constructed across the peninsula of Maryland and Delaware, so as to connect the waters of the Chesapeake and Delaware bays. The dimensions of the proposed canal are to be 100 feet at the bottom, 26 feet below mean tide, with a width of 178 feet at the surface at low ebb tiding, with locks whose chambers are to be 600 by 60 feet, and capable when completed of floating vessels drawing 22½ to 23 feet of water. Of the various routes examined and estimated, a choice will most likely be made from either of the two northernmost routes by way of the Sassafras or Black River, or the southernmost route, by way of the Choptank River, the minimum cost of construction being

\$8,000,000 and the maximum \$16,000,000. The appropriation asked for to begin the work is \$1,000,000, and the provisions of the bill require that the money appropriated shall remain and be at the disposal of the Secretary of War.

This is what a railroad man says of waterways generally: "If the Nicaragua Canal was built 186 miles it would require about four days for a ship to pass through it. The distance from the Mississippi River to Chicago by the projected Hennepin, if it does not go by the way of Davenport and Rock Island, is over 150 miles, and according to the above estimates would require from fifty to seventy hours for a boat loaded with freight to pass through it. An old line of 'prairie schooners' would do it in less time. With five railways connecting the river and the lake that can haul freight between the two points in from five to seven hours, and could dispatch a train every ten minutes, there would seem to be nothing for canal or prairie schooner to transport. The fact of the matter is that the great waterway, the Mississippi, is every year becoming of less and less importance, and will soon be considered an obstruction to transportation, rather than a benefit, and the expenditure of \$8,000,000 for an artificial waterway would only deplete the treasury for the benefit of contractors, and the fame of Davenport's rising statesman, provided he can make the terminus there."

A "country merchant" from Hudson, Wis., writing to the Chicago Tribune, points out a serious defect in the otherwise excellent bill regulating railroads which has just been reported to the House by Senator Cullom's Inter-State Committee. Among other provisions of the bill is one prohibiting the charging of more for a shorter than for a longer distance. However, the commission may make exceptions to this provision when found necessary in special cases where waterways compete with railroads. Evidently this latter clause contains a gross injustice against the water-carrying business, because it will allow the railroads, just as heretofore, to carry on their evil practice of charging comparatively low rates wherever they come within the influence of a competing water-route, and make good for it by higher charges on interior lines—a practice which has already done incalculable injury to the welfare of the nation, and must ultimately result disastrously to the commerce of the country. Were it not for the unfair discrimination by railroads, a much larger proportion of our traffic would go by water, and the sailors upon the lakes, canals, and rivers, as well as those engaged in the coasting trade, would not be compelled, as a big railroad man is said to have put it, "to hoe corn for a living," and their vessels left to decay; and this, too, at the cost of interior communities and the trade generally.

There is one Eastern paper, at least, that has a good word for the Hennepin Canal. It is the Worcester Spy, which in a late issue says: "It is now believed that the Hennepin Canal bill has enough friends in the House to insure its passage. Some members from the Eastern States favor it, but it has scarcely any friends in the Eastern press. Yet it has merits which deserve to be recognized. The canal proposed is in the main the enlargement of an existing canal which connects the lakes at Chicago with the Mississippi through the Illinois River. To widen and deepen it so as to make it navigable for the crafts which use the Upper Mississippi, would require, it is estimated, between \$8,000,000 and \$9,000,000. The advantages of a continuous waterway between the great river and the lakes are apparent. It would make it possible for goods to be shipped, without breaking bulk, from New York City to the western boundary of Dakota, or to any town on banks of any of the Western rivers. It would be of great advantage to all the states which border the Mississippi, especially to Wisconsin, Minnesota, Iowa, Missouri and Kentucky. The proposed canal would be wholly within the limits of the state of Illinois, but that state would derive no especial advantage from it. If any measure of internal improvement has a national character, this has, and its cost is not excessive in view of the benefits to be derived from it."

"POINTERS."

A level-headed contemporary gives the following sensible pointers in regard to wheat deals:

1. Always buy wheat just before a rise. Sell after the rise.
2. Never buy when prices are about to drop. That is the time to sell.
3. When buying on a decline, always buy at the bottom, as you get more wheat for the same money, and the profits are greater when an advance follows.
4. Never sell unless prices drop immediately afterward. This is where many operators make mistakes.
5. Never listen to the advice of a friend unless it accords with your own views. He is on the wrong side.
6. Put confidence in none but "straight" pointers. All others are unreliable.
7. When about to invest your money watch the market very carefully for a few weeks, read everything written by the wise correspondents of the daily papers, listen patiently to everybody on the subject, and after thoroughly making up your mind, take the other side.
8. In conclusion, the most successful operators are those who most carefully adhere to the advice of Puck to the unmarried—"don't."

A farmers' joint stock elevator company will erect a 10,000-bushel house at Milbank, Dak.

THE AMERICAN ELEVATOR AND GRAIN TRADE.

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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

THE PRICES OF PRODUCE.

The astounding development of the ways and means of traffic and communication in modern times has wrought a perfect revolution in the commercial relations of the world's nations. The great facilities of transportation make it possible to balance easily the surplus and minus of production in the various countries, and the market price of the product is no longer determined, as of old, by local influences, but fixed by the countries controlling the large markets of the world. Writing on this subject in the *Banker's Magazine*, H. A. Pierce points to the fact that since time or other the United States controlled all the important staple products of the world, but lost their control in the end by their peculiar commercial and financial policy. Until 1877 the price of wheat, for instance, in the world's market, was controlled by Great Britain. Owing to short crops throughout Europe from 1878 to 1881, inclusive, the United States obtained control of the market, and Chicago speculators fixed the price of wheat. But since 1882 India gradually gained supremacy in the wheat trade of the world, and is now dictating the price of wheat in the European markets, although her surplus is much smaller than that of America and even of Russia.

This singular revolution in the trade, Mr. Pierce opines, though having many other causes, is chiefly due to American speculation in wheat and overproduction in silver, under the compulsory coinage law of the United States, having caused a decline in silver equivalent to 15 cents per bushel in favor of India. We have lost the exclusive control of cotton, of provisions, and "petroleum and corn are the only important staples of which we still make the price for the world," but speculation will eventually become the death knell of even "King Corn." That India and silver make the price for the world's surplus of wheat is proven by the fact that while American wheat is kept up higher than a year ago, wheat in England is at the lowest point of a century, and the American product is no longer a dangerous competitor in the English market.

How long this state of affairs will last nobody can tell; but so long as there are other countries having a large surplus production, America cannot expect to regain her supremacy in the export wheat trade unless the cost of production can be cheapened. "This can be done," says Mr. Pierce, "first by removing the tax that speculation puts on all staples; second, by discouraging silver production, which furnishes India and other silver nations with a medium of exchange whose cheapness adds so much to the value of what they have to sell, while it takes the same amount off of the

value of the products of those competitors whose medium of exchange is gold." "The nation which can produce the cheapest, including transportation to market, makes the price for all its competitors, so long as it has a surplus itself to dispose of."

These reflections would go to show that the commercial and agricultural revolutions of modern times are bringing about a radical change in the products of the various countries, and that a monopoly of agricultural staples except temporarily, on short crops, is a thing of the past. Our supremacy in wheat is lost; corn, and probably oats, will in the future be the great export staples of this country, and it is better to become reconciled to this fact than to continue an unequal competition in wheat.

We fail to follow Mr. Pierce's reasoning on the silver question. We believe, on the contrary, that to demonetize silver would place India absolutely ahead of us in the wheat trade.

COMMISSIONS ON THE BOARD.

The rates of commission to be charged on the purchase and sale of produce on the Chicago Board of Trade have of late been the subject of animated discussion in commercial circles and in the press. Viewing the question from the standpoint of the interests of the general public, the *Chicago Tribune* holds that the charges of commission forming part of the total cost of transfer from the producer to the consumer, vitally affect the price relation between the two, and thereby influence to a great extent the way of passage the products take to their ultimate destination.

Questioning the legal right of the Board to fix a minimum charge that its members shall make for services rendered, the *Tribune* denies that the Board would be justified in disciplining a member for violating such a rule with a view to attracting business to the city of which he is a resident. The fixing of such a minimum rate would introduce the trades union principle into a body which professes to have an "open market," in which the value of things is determined by supply and demand; and it would be simply ridiculous to say that a member of that body shall not sell his services on the same terms as are allowed him in the disposal of grain or pork.

On the other hand, the Board has a perfect right to fix a maximum rate of commission charges. But even that should not be compulsory, but only advisory, and would after all seem quite superfluous. The Board represents the principle of full and free competition between buyers and sellers in all legal transactions, and it would be cutting away the ground on which it stands if it would now try to exclude the personal services of its members from the universal rule which governs its transactions.

INTER-STATE COMMERCE.

The forthcoming Annual Report of the Toledo (O.) Board of Trade contains an interesting article by the Secretary, Mr. Denison B. Smith, dealing at length with the obnoxious system prevailing in this country by which railway managers have power to fix, and do fix, quite arbitrarily their traffic rates, to the incalculable detriment of the business interests of the country.

The state of affairs alluded to is partly brought about by the excess of railway building, so that lines of roads fully capable of moving the business of the country have been paralleled with new roads contesting for the old traffic, multiplying competition, and causing instability in the rates of transportation. However, the principal cause for the unsteadiness of the rates is the system of "pooling," to which the railroads resort whenever they think that their interests are best served by doing so. This institution prospers in the winter, when they can fix their own rates, owing to the want of competition by the water-ways.

The principle upon which pooled roads adjust their rates is that the longer the haul the lower

is the rate per mile. This principle would be fair one within the bounds of reasonable application, were it not used (as is the actual case) to cover discrimination against great trade centers of the country being terminal points for water-carrying business. The rates are so adjusted as to induce inland dealers to send their commodities direct to the seaboard for a market when they would prefer a market near by. When the spring comes, and water traffic sets in, the "pool" is broken, and new rates are fixed so ruinously low that successful competition of the water-ways is out of the question. The result of this method, thus far, has been to reduce the water freight below the cost to the carrier, at the same time bankrupting railways.

The remedy advocated for removing this uncertain and detrimental state of affairs is a supervision of the whole system of inter-state transportation rates by a railway bureau and a commission of capable, experienced men, with power to compel and preserve a fair and equitable system of freight rates, with a view to the ultimate entire control over the rates on the inter-state traffic of all our railways, and the fullest publicity of such rates and all modifications of the same. So far as endorsing the Inter-State Commerce Bill which has been introduced by the Senate, the report recommends that the provisions of the bill be not extended, as it does, to transportation by water, because such provisions are absolutely unnecessary for the water-carrying business. The water highways of nature are open to the enterprise of everybody; there is no analogy whatever between the two systems of transportation, and what is good and necessary for the one would prove ineffectual and become a burden when applied to the other. The water-ways are the great regulators of the cost of transportation, and no attempt to fetter them should ever be made.

CHICAGO'S GRAIN TRADE.

St. Louis papers have been proving to their own infinite satisfaction that Chicago is a bubble city, only waiting a puncture to burst. They have proved that the total valuation of property in St. Louis (a whole county) is larger (on a valuation of 80 per cent.) than the valuation of Chicago (three townships of a county and on a valuation of about 20 per cent.). This is bad enough; but the *New York Sun* deals Chicago a worse blow. It says:

Recent events have turned the tide in wheat speculation in favor of New York. Chicago now grasps second bow, while New York twangs merrily away on the best fiddle to the tune of big commissions for its grain brokers and prosperity for the Produce Exchange. Mr. Armour became interested in the Chicago, Milwaukee & St. Paul Railroad Company. He has neglected wheat speculations to talk about his railroad company, and Peter McGeoch's unfortunate speculations a year or so ago practically left Chicago without a boss manipulator. Baron Charles F. Woerishoffer, Deacon S. V. White, and other Wall street operators have controlled the wheat market for a long time.

An authority, in commenting on the change, remarked "Chicago dies hard, but she has got to play second fiddle to New York on this wheat crop, and the sooner she stops bearing wheat and gets aboard the less she will get left. New York now controls the market for wheat and corn, and it is no use for Chicago to kick against the pricks, unless she wants to kick herself instead of New York. The grain trade is coming here, and coming to stay. The control of the market is here now. The foreign houses which used to hedge in Chicago are all doing it here now, while half the Wall street trade that used to go to Chicago exclusively is now done on the Produce Exchange."

All this is very sad; but it seems that we have heard this song before. We suppose there is nothing for Chicago to do but worry along in poverty, while her trade goes to St. Louis and New York. There was as much as a thousand bushels of grain sold on 'Change in St. Louis the other day; and now Henry Clews, of New York (he of the shiny head, whom Henry Travers advised to go to Vanderbilt's fancy ball with his pate sugar-coated to consistently represent the character of a pill), says that the New York Produce Exchange may yet find itself enjoying all the commission trade in American products. If another city sees something in Chicago that she wants, just take it.

Editorial Mention.

THE Chicago Open Board has established a call, and appears to be well pleased with the result.

THE Milwaukee Chamber of Commerce has endorsed the Cullom Bill, and placed itself on record as opposed to pools.

A LARGE number of the assemblies of the Knights of Labor have petitioned Congress in favor of the Hennepin Canal.

DULUTH is forging ahead. The year 1886, we venture to predict, will be a notable one in the history of the great Northern port.

A. G. STERLING, of Fargo, Dak., has been arrested at Lafayette, Ind., for selling 13,000 bushels of wheat last October, belonging to a Fargo firm.

THE writer witnessed a satisfactory test of the Wolcott Grain Drier in this city last week. This machine was described in our columns a few months ago.

KANSAS CITY is very proud of her new Transportation Committee, which will no doubt be of much benefit to the business interests of that thriving city.

THE grain men and millers at St. Louis have been seriously inconvenienced by the railroad strikes, especially as there has been an urgent demand for export corn.

WE presume the grain men of Atchison, Kan., feel some sort of grim satisfaction in the strike on the Missouri Pacific lines, as the road has been seriously discriminating against them.

THE Barnard & Leas Mfg. Co., of Moline, Ill., enter upon the spring campaign with the capacity of their extensive shops increased and prepared to do a larger business than ever before.

THE Morse Engineering Co., of Kansas City, has been furnishing a lot of machinery for an elevator in Northwestern Kansas, and for several other contracts in other parts of the state.

A CORRESPONDENT asks for the address of Randolph & Judson, a grain firm located somewhere in Illinois or Indiana. Can any of our readers tell us where this firm is in business?

WE are requested to announce that the failure of the Thomas Bradford Co. in no way affects the solvency of the old Bradford Mill Co., of Cincinnati, which is an entirely separate and distinct concern.

MANY of the Chicago Board of Trade members are anxious to re-establish the old iron-clad commission rule, believing that the rule can be enforced if the punishment for its violation is made severe enough.

J. C. BATES, of this city, proprietor of the Bates Champion Grain Drier, 189 La Salle St., Chicago, has issued a neat circular describing this appliance, which interested parties can obtain by sending for it.

OHIO seems to have a good-sized corner on the business of furnishing metal roofing and siding. Among the firms dealing in this specialty in the Buckeye State is that of W. G. Hyndman & Co., of Cincinnati, well-known manufacturers of

crimped and corrugated iron roofing, siding, ceiling, metal shingles, etc. Write them for their circular and price list.

THE grain receivers here are unanimous in their condemnation of the frosted wheat which has been shipped here from Duluth. The general idea is that it is not good enough for chicken feed, and worth 'steen cents per bushel.

IT is a little curious that many of the enlightened statesmen who are opposed to an appropriation for the Hennepin Canal are willing that the United States Government shall guarantee a yearly revenue to the Eads Ship Railway of \$2,500,000.

MR. IGNATIUS DONNELLY, who has belonged to all political parties, and has been of no special credit to any, seems to have captured the Farmers' Alliance of Minnesota. The farmers' cause would gain more respect under a leadership other than that of Mr. Donnelly.

THE Lake Carriers' Association seems determined to have the matter of grain shortage thoroughly sifted, and the responsibility placed where it belongs. The decision of Judge Brown, quoted on another page, goes far to sustain the position taken by the vesselmen.

WESTERN readers will notice the card of Mr. John C. Kilner, of York, Neb., who deals in all kinds of mill and elevator supplies and general machinery. Mr. Kilner can supply anything his patrons may want, of a quality and prices which he is sure will be found satisfactory.

THE new catalogue of the Webster & Comstock Mfg. Co., of this city, for 1886, now being sent out, is not only very handsome, but is full of interesting and useful information. Every grain dealer and miller in the country can obtain a copy of this catalogue by sending their address to the company.

A CORRESPONDENT of an Iowa paper suggests that the state of Iowa build, own and control a line of road from Clinton to Chicago, so as to settle for all time the Iowa pool business. The plan is feasible enough; the road would be only about 150 miles long, and could not be frozen out or absorbed if backed by the great Hawkeye State.

THE proprietors of Rosenheimer's moonshine elevator, at Kewaskum, Wis., have been arrested for carrying on the fumigation of barley. A sulphur pot with steam pipe and trap connections was found in the basement of the elevator. The Milwaukee and Chicago Boards of Trade are said to be at the bottom of the raid upon the "moonshiners."

MESSRS. G. W. & C. A. LANE, of Exeter, N. H., print in their card in this issue a couple of excellent testimonials to the value of their automatic power shovel. The Messrs. Lane also deal in mill and elevator machinery, and sell each machine as a guarantee that it is just what it is represented to be. They solicit correspondence from grain and mill men.

PROMINENT business men and citizens of Hastings, Neb., met on March 2 to take some action in the matter of grain prices at Hastings, which for some time past have been lower than at neighboring points. It was shown by persons having investigated the matter that a systematic discrimination in freight rates practiced against Hastings by the B. & M. Road was at the bottom of the trouble. Feeling indignant at this, the meeting adopted a resolution appointing a committee which was to wait on the business men and shippers of the town and solicit an agreement from them to boycott, as far as practicable, the discriminating road. Another meeting was called for March 10 for the purpose of taking further

action, if necessary, to accomplish the object sought for, viz., the reduction of rates, so as to place the town on an equal footing with surrounding shipping points.

THE Agricultural Society of Waseca county, Minn., meeting at Waseca on Feb. 28, passed a resolution to boycott the Waseca mills and elevators by refusing to market grain at that point. The movement is chiefly directed against Mr. Wm. Everett, who, it was alleged, had been enabled to keep the prices too high for flour and too low for wheat, so that from three to five cents a bushel less was paid than in the Janesville market. Hon. P. McGovern, on the other hand, who spoke on behalf of the merchants and millers, claimed that the public had been treated fairly, the difference in the prices at different points being caused by freight rates.

THE Frost Manufacturing Co., of Galesburg, Ill., have an announcement in this issue which all those wishing machinery either for repairs, additions, or complete new houses, will do well to consult. This establishment has enjoyed a very excellent trade the past year in spite of prevailing dullness, and at the present time they have plenty of work, and report that prospects for trade were never better. This, of course, is due to the reputation for good, honest work which the Frost Manufacturing Co. have achieved, and which they are determined to maintain. They will take pleasure in corresponding with parties who are looking for machinery.

ON Jan. 9, 1886, Schwartz & Dupee, members of the Chicago Board of Trade, filed a complaint with the Board of Directors to take action against William W. Boynton, who, they said, owed them \$14,305.92, which sum they were unable to collect. Mr. Boynton made a complete defense before the directors to the charges laid against him, claiming that he was not indebted to the firm on account of any transaction made under any rule of the Board of Trade, and that the firm did not claim such to be the case. As, however, the directors threatened to suspend him, Mr. Boynton filed a bill in the Circuit Court to restrain the Board from suspending or expelling him from its membership, as such a proceeding would work irreparable injury to him. He was granted a temporary injunction in bond of \$1,000.

A DECISION OF INTEREST TO GRAIN DEALERS.

WE have received advance sheets of a recent decision of the Supreme Court of Illinois which is of importance to grain dealers and warehousemen. The case is that of Buckley & Co., of Peoria, against the Pekin & Peoria Union Ry. Co., which will be reported in the 114 Illinois Reports.

The facts in the case were that Buckley & Co., who were grain dealers and members of the Peoria Board of Trade, received two cars of oats which were standing on track. It proved on the trial that it was the usual custom in Peoria, when grain is consigned to a dealer, and the cars stand on track, to have it sampled by a person appointed by the Board of Trade for that purpose. The sampler gives a ticket stating the kind and grade of grain inspected, and the names of consignees, and posts one of these tickets in the car, and gives the other to the consignee with a sample of the grain. This practice was followed in this case. It also appeared that it was customary among dealers on the Board of Trade of Peoria, when a sale is made on the Board, for the seller to mark on these tickets the name of the person to whom the grain has been sold, and the price at which it is sold, and give it to the purchaser with an order, either verbal or written, to deliver the grain sold at such place as the buyer may designate.

In this case the grain was sold on the Board to a man named Patterson. The inspection tickets were delivered to Patterson, and on the tickets Buckley & Co. wrote the price, in figures, at

which oats had been sold, and marked thereon the letter "A," which indicated the elevator at which Patterson wanted the oats sent. The oats were sent to that elevator by order of Buckley & Co., and were there unloaded. Patterson had paid for the oats by check, which check was thrown out next day for want of funds. The oats he had received from the elevator "A" belonging to P. & P. U. Ry. Co., and shipped out.

When Buckley & Co. found the check worthless they went to look for the oats, and found them gone. They claimed that they had not ordered the grain delivered to Patterson, but simply to the elevator at which he directed it delivered, and that while they had given the sample ticket to him they had not indorsed it or written his name on it, but only the price agreed on for the oats. The Railway Company claimed that the delivery of sample ticket with price marked on it was, under the general practice, substantially authority to them to deliver to the holder of sample ticket.

The court, however, decided that the delivery of sample ticket without an express order to deliver to holder of such ticket, was unauthorized, and held Railroad Company liable for the value of the oats.

EXPORTS OF BREADSTUFFS.

According to the February report of the Bureau of Statistics at Washington, the exports of breadstuffs from the United States during the month of February, the two months ended Feb. 28, and the eight months ended Feb. 28, 1886, respectively, as compared with the like periods of last year, were as follows:

For February, 1886, barley, 20,404 bushels, valued at \$13,769, against 26,806, valued at \$12,385 in February, 1885; Indian corn, 6,185,197 bushels, valued at \$3,122,528, against 7,249,308 bushels, valued at \$3,775,133; Indian corn meal, 15,681 barrels, valued at \$47,042, against 11,591 barrels, valued at \$36,242; oats, 20,366 bushels, valued at \$9,347, against 306,689 bushels, valued at \$121,895; oatmeal, 1,864,938 pounds, valued at \$41,570, against 3,214,523 pounds, valued at \$112,106; rye, 14,518 bushels, valued at \$9,809, against 90,914 bushels, valued at \$55,732; wheat, 5,058,107 bushels, valued at \$4,173,917, against 5,269,722 bushels, valued at \$4,424,188; wheat flour, 573,135 barrels, valued at \$2,686,949, against 881,778 barrels, valued at \$4,209,531. The total value of all these breadstuffs was \$10,104,931 for February, 1886, and \$12,747,212 for the same month in 1885.

The exports for two months ended Feb. 28 were: Barley, 35,549 bushels, valued at \$24,757, in 1885, against 46,761 bushels, valued at \$22,058 in 1886; Indian corn, 12,259,629 bushels, valued at \$6,140,637, against 14,167,358 bushels, valued at \$7,281,664; Indian corn meal, 36,634 barrels, valued at \$110,967, against 29,058 barrels, valued at \$92,344; oats, 246,041 bushels, valued at \$97,854, against 500,742 bushels, valued at \$192,601; oatmeal, 3,047,960 pounds, valued at \$72,915, against 7,395,537 pounds, valued at \$218,704; rye, 14,518 bushels, valued at \$9,809, against 257,520 bushels, valued at \$172,868; wheat, 9,076,915 bushels, valued at \$7,608,370, against 15,671,912 bushels, valued at \$13,117,709; wheat flour, 1,163,542 barrels, valued at \$5,446,937, against 2,011,829 barrels, valued at \$9,521,677. Total value of exports, \$19,512,246, against \$30,619,625.

The exports for the eight months ended Feb. 28 are shown by the following figures: Barley, 172,883 bushels, valued at \$119,379, against 566,662 bushels, valued at \$310,079; Indian corn, 36,564,946 bushels, valued at \$18,909,545, against 27,611,770 bushels, valued at \$14,837,195; Indian corn meal, 205,942 barrels, valued at \$620,919, against 153,422 barrels, valued at \$486,740; oats, 5,196,373 bushels, valued at \$1,763,092, against 2,850,902 bushels, valued at \$850,493; oatmeal, 22,503,452 pounds, valued at \$572,577, against 27,202,363 pounds, valued at \$774,465; rye, 143,468 bushels, valued at \$93,116, against 2,591,594 bushels, valued at \$1,740,271; wheat, 29,606,897 bushels, valued at \$25,985,375, against 67,767,683

bushels, valued at \$57,751,760; wheat flour, 5,117,160 barrels, valued at \$24,441,975, against 6,790,871 barrels, valued at \$33,569,129. Total value of exports, \$71,510,978, against \$110,320,132.

ORDINARY, COMMON LYING.

This paper bears no love for the railroads, but it trusts that whatever opposition it may feel called upon to manifest is not based on such palpable falsehoods as the professional agitators propagate. For instance, notice the following from a Nebraska paper:

The average cost of transportation of Nebraska grain to Chicago is \$66 each ton. As it is admitted that good profit can be made by the railroad company when they charge 12 cents a bushel or \$4 per ton, and \$2 per ton for handling, we find that the grain should go to Chicago for \$6 per ton. A clean steal of \$60. The Nebraska crop was 2,000,000 tons, which makes \$120,000,000 stolen last year, \$10,000,000 more than the assessed valuation of the whole state.

Figures are the best hold of the demagogue, chiefly because there is a popular delusion that figures *must* have facts to back them. But just notice the figures given above. How any paper can have the massive cheek to present such a statement to its readers we can not imagine. In the first place not more than 20,000,000 bushels of grain were shipped from Nebraska, instead of 2,000,000 tons. Instead of the cost of transportation being \$120,000,000, the charges were less than a thirtieth part of that sum. If \$120,000,000 had been stolen from Nebraska last year by the railroads, dividends would have been larger. But the average demagogue cares nothing for facts, and the meanest, most unscrupulous kind of a demagogue is the paper professionally devoted to finding grievances.

CONCERNING WHEAT IN THE SOIL.

The meeting of the State Alliance of Minnesota was signalized by the prominence given to the demagogues in directing the deliberations of the body, drafting its resolutions, and addressing it in the style peculiar to the Minnesota "professional friend of the farmer." Whether it is caused by the exhilarating atmosphere of the state, or the exuberance of the Minnesota granger's gullibility, we know not; but the professional agitators of that state are only equaled in their utterances by the anarchists of Chicago. And they have able allies in such papers as the *Western Rural*, of this city, which is among farmers' papers what Ignatius Donnelly is among politicians. But we started out to show a new remedy for low prices of wheat. The discoverer of this invaluable commercial elixir is Hon. John Diamond, of Blue Earth county. Addressing the Alliance, Mr. Diamond said:

"The time has come when farmers must act together as to the value of what they sell and purchase. A first essential is co-operation to secure fair prices for our products—prices that with reasonable economy and good management will give us some return for our labor and capital invested. This is justice, nothing more. We have many valuable lessons before us of railroads and corporations to guide us in defending our interests. Manufacturers of all kinds of goods agree upon prices and firmly live up to them to sustain themselves. Can we educate ourselves as farmers, to raise a certain amount of grain and stock of all kinds and no more, in order to sustain prices, and if necessary for that let the land rest for one year, and thus stop this gambling in our products. We must so conduct our farming operations as to have the demand at least equal if not greater than the supply. It don't require \$100,000 to pass such a law by the legislature and have men live up to it. We must not depend upon the law to give the farmers relief. I can't see the benefit or the saving to the farmers in our warehouse and grain law and state inspection.

Brother farmers, we are the main arm of all prosperity. Poor crops mean general business depression and hard times; and an abundance of farm products means general prosperity. Then why should not the farmers' interests be protected? Simply because we allow ourselves to be imposed upon. We must bring about a change in this respect in the future. We must work together, and especially must we select men that will honestly represent us in legislative halls.

There you are! All in a nutshell! It is not too late. Let the farmers of the Northwest plant only half as much wheat as last year, and half as

much corn. Let the farmers of the remaining portion of the country do the same, and the whole thing is done. Of course, the lowest prices for years, both of wheat and corn, have occurred in the face of short crops, but a little circumstance like that need not disturb the farmer; nor need it be taken into account that present prices of wheat are sufficient to allow the importation of wheat from Russia and India. What Mr. Diamond wants is a dollar for wheat at the station, whether that dollar buys much or little. Mr. Diamond is ass enough to go to Congress, and the Alliance ought to send him there.

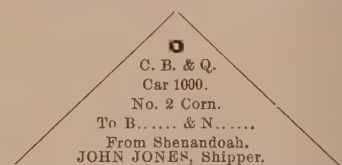
VERY FLY.

A correspondent of the Chicago *Tribune* writes the paper as follows from Red Oak, Iowa:

I have been considerably interested in the discussion carried on through the columns of your paper concerning the Chicago grain trade. One correspondent thinks that it is too rigid inspection; another thinks it is excessive commissions and other charges. There is nothing in either of these two causes. One-half cent on corn and oats and one cent on wheat is as low as any honest corn firm can handle the stuff, while the switching, weighing, and inspection charges don't amount to anything.

Another writer cites the fact that St. Louis has a five cent less rate from most all Nebraska and Iowa points, given because they had to pay more from there to the seaboard, which is not a fact, as every one must know who will take the trouble to work out a simple sum in addition and subtraction. The man who said that corn could be moved from York, Neb., to Baltimore for ten cents less than to have it go through Chicago is not far from right.

While there is no good "horse" in hauling grain to St. Louis for five cents per 100 pounds less than to Chicago, when the distance is the same and in some cases farther, there is another cause that I have stumbled onto that cuts a pretty good figure, and it is this: The St. Louis track-buyers have introduced a system of inspection that lays over any system I ever heard of. They furnish their customers a card like this diagram, which is suspended in each car of grain as it is shipped, and the inspector has instructions, like the destroying angels of old, to pass over every car that has these cards in and issue certificates accordingly. Here is a specimen:



A car of corn equipped in this way always passes as per card. When the East St. Louis inspector opens a car he don't have to get into it with his tryer, but simply reaches up and gets the card and issues a certificate from that.

A BULL ON WHEAT.

Mr. C. H. Seybt, of Highland, Ill., Chairman of the Executive Committee of the Millers' National Association, has lately been through the winter wheat belt, and is reported to have expressed his views as follows:

"The acreage sown to wheat is smaller than last year. A large area of land in which corn was planted last year was sown to wheat last fall, but it was so late before this corn was ready for the wheat crop—about four weeks later than the time for sowing the other—that it is all winter-killed. I don't suppose this fact will affect the market price of wheat one-sixteenth of a cent one way or the other. Dakota is an unknown quantity."

Regarding the present situation of the wheat market, Mr. Seybt said that he considered it particularly solid. "I don't speculate in wheat," he said, "but if I did, I should be a bull. The European crops have been good of late, and by the law of averages they ought to be poor this year. In France they have had good crops for three years, and this can't go on forever." Regarding flour, he said: "It is a mistaken idea that there is a large stock of flour in the hands of consumers. For two years the condition of the market has been such that a man could always buy cheaper a week after he made a purchase. For this reason the consumers have lived from hand to mouth, buying just enough flour for present uses, and no more. If the time ever comes—and it is bound to come sooner or later—when consumers take a notion to carry the stocks that they used to, the much-vaunted visible supply of flour will melt away like the snow before the April sun."

A certificate of incorporation of the Buffalo Floating Elevator Company has been filed in the county clerk's office. The incorporators are Stephen M. Ratcliffe, Charles E. Williams, Daniel McNaughton, John A. Campbell and William D. Crosthwaite, who are also the trustees for the year. The capital stock is \$40,000 in shares of \$100 each. The object of the corporation is the construction and maintenance of floating elevators in that city.

Press Comment.

A DISSENTING VOICE.

The Hennepin Canal scheme, which was originated some years ago, is just now being boomed vigorously. This scheme is important only as it has been used, and will be used, for the purpose of watering congressional and senatorial stock. Its most ardent supporter has never yet been able to show that, if built, it will be of any value, unless, perhaps, it could be fenced in and used as an inter-state skating course. However, this will not prevent statesmen from raiding the treasury to raise money to dig the ditch.—*The Chicago Mail*.

MR. DONNELLY'S RESOLUTIONS.

The convention of the Farmers' Alliance at Minneapolis is composed chiefly of honest and intelligent representatives of the farmers of the state, sincerely desirous to bring about such necessary and legitimate reforms, especially in the management of railroads and elevators in this state, as will relieve the farmers of what they deem to be unjust and oppressive burdens in the transportation and marketing of their products. We hardly think the resolutions introduced and pushed through by Mr. Donnelly fairly represent the spirit and purposes of the convention. As a body they are not disposed to insist on violent remedies or intemperate measures. They want such legislation as will adequately protect them from unjust exactions by railroad corporations or elevator companies; but they are not disposed to yield to the demands of the more radical extremists, or to join Mr. Donnelly in stigmatizing as plunderers and thieves all who are charged with the management of the railroads of the state.—*Pioneer Press*.

THEY CAN'T GROW HARD WHEAT.

While there is no denial of the fact that the Indian competition is a serious menace to American wheat growing, still there is left to the Northwest one element of security that can not be affected by India's wheat product. India can not compete with us in the production of hard wheat. In view of this fact it should be made a matter of special attention on the part of our Northwestern wheat growers to see that the standard of our wheat is kept up. As long as there is wealth and wealthy classes in the world there will be a demand for Minnesota hard wheat. As long as there are people who will have luxuries regardless of the cost of getting them, there will be people who will prefer bread made from hard wheat, and will have it, no matter if it costs double the price of the Indian product. It will be well for our Northwestern farmers to keep this fact in mind, and instead of becoming shaky at the prospect of Indian competition, they should stiffen up with the purpose to keep the standard of Minnesota hard wheat well elevated.—*St. Paul Globe*.

A RAILWAY VIEW OF THE ERIE CANAL.

The Erie Canal, which has for many years been a loadstone about the necks of New York political and commercial affairs, is just now the subject of much debate by two parties in that state, one insisting that the general government should devote a considerable sum toward its improvement and maintenance, and the other advocating the more creditable view, that it devolves upon the state to do whatever is done in this direction. A still more sensible proposition would be to draw the water out of the old ditch and fill it up so it might be cultivated by the farmers whose lands adjoin it. The age of canals has long since passed away, and they should be buried in the same grave with turnpikes, plank roads, and the old time Indiana corduroy temptations to profanity. All this talk about continuing the few canals that are now in existence is neither more nor less than an expression of sentiment without foundation, reason or common sense. They are not needed and benefit nobody unless it may be the few cross roads politicians who make use of them simply as a means of securing and obtaining public office. It is folly for the state of New York and would be still greater folly for the general government to invest any more money in the Erie Canal.—*Railway Age*.

AGRICULTURE AND MANUFACTURES.

American agriculturists seem to be very much impressed with their independence of other industries, but agriculture in the United States can only be successfully prosecuted while our manufacturing industries are in a flourishing condition. This is a principle so apparent as to be easily understood. The tiller of the soil often flatters himself that the world depends upon the turn of his plow and the sweep of his sickle; and that he can flourish just the same in a land of closed or unbuilt factories and workshops as where the song of the loom and the roar of the furnace keep time to the threshing machine and the dash of the churn. He never stops to think that for every ox, hog, bushel of wheat or corn exported, ten oxen and ten hogs, and ten bushels of wheat or corn are consumed in the country, and that, consequently, if our manufacturing industries are in a flourishing condition the farmer can snap his finger at foreign trade, while if our manufacturing industries are dull, he can eat his own hog and corn, and burn the latter for winter fuel to keep his household from freezing. Were our farmers as much alive to their own interests,

in the most intelligent sense of the term, as they seem to be in their selfish eagerness for the free admission of foreign manufactures, under the belief that they could buy their clothes cheaper and still have the same demand for their own products with our nation alive with hungry and idle workmen, they would be the foremost in demanding protection for American manufactures, and thereby secure enlarged consumption and profitable prices for their products.—*American Exporter*.

THE VISIBLE AND THE INVISIBLE SUPPLY.

The wheat crop of 1884 was a very large one, that of 1885 was by comparison a small one. The fact of a very large crop in 1884, and the probability of a very large amount being carried over by the farmers, seemed to be entirely lost sight of in the spring of 1885, when it was developed that great winter damage had been done to the growing crop. Everybody was inclined to go wild over the prospects of extremely high prices. To the minds of those who took a conservative, and really sensible view of the situation, the expectation for extremely high prices for wheat was entirely unwarranted by all the facts in the case. They argued that even allowing the estimates placed on the growing crop were correct, all the evidence went to show that a very large amount of the previous year's crop was still in first hands, and that with the two together, there would be sufficient wheat to go around, and to spare, unless an extraordinary, and, then, unlooked for demand should spring up. Subsequent results sustained the soundness of that position.

Speculators have been beaten. Men who do a legitimate business and laid in large stocks of wheat in anticipation of a heavy advance have been beaten, and as the crop year draws to a close it becomes evident to all that the wheat will more than hold out. The facts thus laid bare make it evident that while the visible supply is an important factor in determining present and prospective values, it cannot be entirely relied upon; the invisible is quite as important, although it cannot be measured.—*Southwestern Miller*.

OUR WHEAT TRADE.

It may be that we shall be compelled to give up wheat growing in the United States. Unless we can get our rates of transportation down to a figure that shall not represent absolute robbery, it is pretty sure that we shall. Take Dakota, for instance. The railroad is simply fleecing the farmers alive, and there is never likely to be a price for wheat that will make wheat growing in Dakota half as profitable as it ought to be, under circumstances like those which now exist. But our export trade is in a very bad condition. This is the season when the exports of breadstuffs ought to be most active. Instead of being active, however, there is scarcely any export trade at all. According to the reported visible supply of wheat we have 15,000,000 bushels more than we had last year at this time; 23,000,000 bushels more than we had in 1883, and 38,000,000 more than in 1882, though *The Rural* believes that usually the figures which represent a crop are too high. As a matter of fact they sometimes grossly misrepresent, and one of the most difficult things in the world to accomplish is to get at the correct amount of grain in the country. The statement of such things is not made by the growers or usually in the growers' interest. However, the above are the figures given. Now we have, according to this, the wheat for export, and the English demand more foreign wheat than they did last year. But they are not taking ours. Where then do they get their wheat? From India, Australia and Russia. Wheat is low in our home markets, but England does not want it even at a price that is unprofitable to the grower. Why? Because she can get wheat at a still lower figure than even the low price at which we would furnish it. Europe is taking our corn in larger quantities than she did last year, but she does not want our wheat.—*Western Rural*.

TRADING ON COMMISSION.

The case of Higgins & Gilbert vs. McCrea, is terminated by a decision that is of very great importance to the commercial world in more senses than one. The suit was for money lost by the defendant through the plaintiffs, in the Chicago market for provisions, at the time of the well-remembered McGeech failure; and cross-suit was entered on the plea that the transaction was of a gambling nature. The decision of the court at Cleveland, against the plaintiffs, was based chiefly on the fact that the books of the firm did not show in every case the specific transfer of the property to named individuals, though they did show the parties with whom the original transactions were made on 'Change. There was, however, no room for legitimate doubt that the plaintiffs had really bought the property from others as per order, and had disposed of it to still other parties, under the rules of the Chicago Board of Trade, when the principal failed to respond with margins as requested. It is probably on this point that the Supreme Court of the United States has reversed the original decision and orders judgment to be entered against Mr. McCrea for the amount claimed.

This action not only establishes the validity of speculative contracts, and prevents the entering of several other suits to recover heavy damages from members of our Board of Trade, but shows the danger of transacting a "bucket-shop business" while claiming to act on commission. If Higgins & Gilbert had done so they would not have been able to prove their case, and might at this moment be in the deep shadow of coming bankruptcy

due to other suits which would have been instituted by men who have lost through that firm. If there be, as is thought by some, any member of the Board who "take the trades themselves" on receiving an order to buy or sell, they simply become unable to prove their case in court in the event of loss, and the supposed customers are equally unable to recover if the "market go against them" to a greater extent than suits the bank account of their supposed agent. The risk is really a much greater one than may appear on the surface independently of that which the customer incurs by having as agent a firm that is interested in seeing the speculation go against him. The last-named phase of the liability is so serious that it may well suffice to deter any one from sending orders to a party open to the suspicion of such double dealing. It is not difficult to conceive that the apathy so much complained of is in part due to the fear entertained by some that the commission merchant does not in every case do the best he can to serve the interests of those who favor him with their orders.

It is understood that this matter is under consideration by some of the leading members of the Board, in the hope that some means may be devised for increasing the measure of security felt by patrons of its traders. It seems now to be probable that they will recommend the expression of a willingness to give the names of other firms traded with in a given transaction whenever so desired by the client. Some firms do this already, and if the policy were adopted by a moderate number of well-known houses it would soon become necessary for the rest to do likewise. It should not be difficult to bring about such a change in methods, especially when the argument in favor of doing so can be strengthened by reference to the outcome of the suit above cited.—*Chicago Tribune*.

THE STATE CANALS.

The Dominion is neither so popular nor so wealthy as New York, and it has a debt of \$255,966,417 compared to our debt of \$4,798,666; yet it has spent within a few years on one bit of canal, less than nine miles long, more money than we are begging from the general government; and it has spent on its canal system in the same time a sum equal to what the new capitol at Albany will cost, according to the latest estimates. In the meanwhile Canadian statesmen entertain such projects as the Ottawa ship canal, a route shortening the line from Montreal to Chicago, by following the Ottawa river to the Mattawan, the Mattawan to Trout Lake, then to Lake Nipissing and down the French river to Georgian bay; the Trent river navigation, a route following that stream to Rice lake, thence along various connecting lakes up to Lake Balsam and thence down by canal and the Talbot river to Lake Simcoe and from that point by the Severn river to Georgian bay; the Toronto and Georgian bay canal, a third scheme for a waterway connecting Lake Huron and Lake Ontario and shortening the distance between Toronto and Chicago; and the Caughnawaga canal, a route from a point on the St. Lawrence river opposite Lachine to St. John's on the Richelieu river. Surveys of nearly all these routes have been made and estimates of their cost prepared. If, therefore, the example of the Dominion is invoked in this matter the lesson to be drawn from it is one of self-reliance. At least if we are to ask for federal aid in enlarging our main canal let us ask the United States to step in and build a waterway connecting the Hudson and Lake Ontario on the scale adopted by our Canadian neighbors. If the nation is to do anything at all in the matter, let it do something worthy of itself and make a ship canal from tide water to the lakes—a great artificial river through which the water of Lake Ontario may flow to the sea, unbroken by any system of lockage.—*Rochester Post Express*.

A RIGHTEOUS DECISION.

Judge Brown, in the United States District Court, Detroit, has just rendered an opinion on the question of shortage in grain cargoes, which will prove a valuable precedent for vessel owners and masters. The case was brought against the schooner Lizzie A. Law in an effort to recover the difference in the amount of grain called for in the bill of lading and the quantity actually delivered. Judge Brown declared that it was only necessary for the owners to show that all the grain received in the cargo was delivered. As all efforts at reform in the matter of shortage and bills of lading have heretofore proved of no avail this decision is highly gratifying, and if followed up by vessel men will prove of great value as a precedent.

No other branch of business in the country is subject to wrongs such as lake carriers are in elevator shortage without some form of redress, and the suggestion was made in the *Marine Record*, Vol. VII, No. 38, that owners should refuse to account for more grain than they actually received, notwithstanding the terms of the bill of lading, taking their chance for justice before a court. If this were done, the wrong of being obliged to pay for shortage, justly complained of, would soon disappear. It will be necessary, however, for owners and masters to adopt some system whereby shippers and receivers may be assured that the carrier is acting in good faith, and to prove beyond cavil that cargoes have not been broached or tampered with. Positive testimony to this end may be found in a system of sealing the hatches after the cargo is aboard, which should remain intact until by an official at the elevator at the port of destination, the seal is broken for the discharge of cargo. While it is not our desire to deny that officials of elevators believe that their finding of shortage is just, we do say that if they could not realize on the quantity

not produced, their complaints would disappear entirely, against the vessels, and it would then become a war of the elevators, and they would be foemen worthy of each other. That is, they would be compelled to seek address where the cause or difference arose. It has been known for years that the elevator system of the country was sadly in need of investigation by national, state and municipal government, but every effort to obtain legislation to that end has failed. If by this decision of Judge Brown the owners of elevators can be made to investigate each other, we may, by logical sequence, look vain for cargo shortage. It will have disappeared and become a thing of the past.

In case bills of lading can not be modified to conform to the new order of things, and notwithstanding the catches are sealed, shortage still continues to occur, the vessel man should protest against payment and go with the case before the admiralty courts, where, with Judge Brown's decision as a precedent, he has many chances in his favor. No elevator management has, to our knowledge, been led to confess that there is any chance for mistake in their system, or drafts or tally; but it is known that there is such mistake. Not only this; it is known that tally can be made to correspond, say at Duluth and Buffalo. Therefore if the complaint can be settled without looking too closely after the mystery of the elevators, by taking the difference out of the pockets of the elevator people, it would be a grand point gained. *Marine Record.*

ITEMS FROM ABROAD

The Swedish Parliament is reported to have rejected, by a majority of seventeen, the proposal to levy a tax on imports of foreign grain.

The official reports of the wheat crops in different portions of British India are favorable to a good yield for the 1886 harvest, now approaching or in progress; area somewhat smaller than last year.

The London *Economist* states that: "Farmers' deliveries of wheat have been large, and bring the aggregate fresh supplies well toward the average requirements, so that the depletion of granary stocks would not appear so large. These liberal deliveries by the farmers suit, however, have trench upon stack-yards perceptibly."

The breadstuffs trade of England is just now presenting a rather unpleasant picture, contemplated from an American point of view. In January last the United States imported into the United Kingdom only 549,747 bushels, against 2,567,188 bushels the same month last year. On the other hand, the imports from India were 452,488 bushels for the same month in 1886, and 681,475 bushels in 1885. In 1886 India furnished 44 per cent. of the total imports of wheat into the United Kingdom, and the United States only 16 per cent., whereas in 1885 the ratio was 59 per cent. for the United States and nearly 10 per cent. for India. It can not be expected that this sudden revolution in the import grain trade of Great Britain will last, as the differences are entirely too abrupt, and a reaction is sure to come, sooner or later. In the meanwhile English wheat is 12@15c per bushel lower than a year ago, and 35 to 40 cents lower than the average of the last ten years.

The London correspondent of the *Commercial and Financial Chronicle* says: "During the five months ending Jan. 31 our payments for wheat were, roughly, £1,650,000 less than in the corresponding period of 1884-85. Our indebtedness for flour was at the same time about £65,000 less, and for cotton about £3,000,000 less. This amounts to a difference of about £5,615,000. On the other side of the account it must be remembered that during the closing months of 1884 we sent about £1,000,000 more in gold to America than in the corresponding period of 1885; while in January of the current year we received about £700,000 more than in that month of 1885. From a total of £5,615,000 it is therefore necessary to deduct £1,700,000 as the variation in the bullion movements and ample margin will still remain for the shipments already made, to say nothing of the extra shipments of goods from this side and the diminished value of other articles of food received from the United States."

In the face of the extraordinary low prices of wheat that have of late prevailed in the English markets, the question of import duty on breadstuffs is more and more becoming a subject of animated discussion in the English press. Referring to the fact that France and Germany, after careful investigation and protracted discussion of the subject, concluded that an import duty on breadstuffs was indispensable to prevent the ruin of their agricultural industry, John J. Molloy, in the *Morning Post*, says that "the time appears to have arrived when it becomes necessary to inquire whether it is for the benefit of the entire community that the manufacturing population should have their daily bread—already very cheap—at such price that those engaged in the production of it throughout the United Kingdom shall be compelled to abandon that industry and seek for support either by competing with the overstocked labor market at towns, or by throwing themselves upon the rates—in other words, whether the entire wage-earning population are in a better position from that portion of it en-

gaged in manufacturing and mercantile pursuits having their bread 6d. to 8d. per family per week less than such prices as would prevent 3,000,000 to 4,000,000 engaged in agriculture being thrown out of employment." Being convinced that the nation generally would be a loser by the agricultural population being deprived of their employment, he concludes that the interests of the people would be best served by levying such a moderate import duty on grain and flour as would enable the producers of breadstuffs to continue their industry without absolute loss.

HISTORY OF THE FIFE WHEAT.

Our readers all know something of Fife wheat, but may have never read its curious history and the revolution it has wrought in the history of milling. Half a century ago one of those active, clear-headed Scotch weavers, who, in one way or another, have done so much for civil and religious liberty in both continents, left his loom and shuttle in the "land of cakes" and catechisms and struck out for himself in Canada. Ten years later he paid a visit to his native Paisley, and on the day he sailed a friend bought for him a "Tam O'Shanter" bonnet, and as he was passing by a wharf he found a vessel unloading Russian wheat, and reaching over he put a handful of it in the Tam O'Shanter.

When Mr. Fyfe returned home he planted the wheat in the garden, and when the harvest came it was all struck with the rust except the heads from one or two seeds, which were entirely free. This was planted and proved rust proof. But the cows broke into the garden and destroyed all but one or two heads, and it was years before enough was raised to sow a field. It spread rapidly on new, strong, clay lands, but the millers did not know how to handle it. Then, with the exhaustion of the soil, it ran out. It was started again from a few kernels that had hung together for years in a garret and finally, by some happy accident, reached the new lands of Minnesota. Here it grew amazingly, but still the millers could not handle it. Finally the wheat not adapting itself to the mills, the mills were adapted to the wheat, and the result is the "new process" flour, probably the best and most nutritious the world has ever seen.

The interesting problem remains to be solved whether the Fife, or hard wheat, will flourish when the soil of the Northwest is exhausted of its virgin strength and the "new process" fail for want of material, or whether the deterioration is in the wheat and not in the soil, and can be restored by the importation of similar wheat from Russia. The handful of wheat in the old Scotchman's bonnet changed the milling industry of America.—*Iowa Homestead.*

WHEAT AS HIGH IN CHICAGO AS IN LIVERPOOL.

The low price at which East India wheat can be sold in England is among the nightmares that afflict speculators. The case was recently stated in a very forcible manner by Horatio Seymour, Jr., a civil engineer of national reputation, formerly a resident and State Engineer of New York. He now resides in Michigan. He puts the question as follows: "This India wheat can be laid down in the London and Liverpool markets at 57 cents a bushel. It can be brought to New York by way of the Suez Canal for 80 cents, and but for our protective duty of 20 cents per bushel it could be laid down there at that price. Our farmers should note these facts and take steps to protect themselves. As matters now stand they can not expect better prices than they now receive unless a bad harvest, a famine in India, or a desolating war should intervene to put them up."

A statement of the facts even more concise than that of Mr. Seymour may be made. To-day June wheat is worth 86 cents in Chicago, 96 cents in New York City and 102 cents in Liverpool. Liverpool appears to have lost control of the price of wheat in Chicago. With diminishing exports, the Western wheat-elevators bursting with their contents, and the India scare, wheat remains at a tolerably fair price in Chicago—not very high, not too high, but not very low, and not as low as it has often been when wheat fleets dotted the ocean between New York and Liverpool, and gold to purchase American wheat was shipped by the cargo from London to New York. It is evident that something besides a foreign demand is keeping wheat at its present price. A few months ago it was sold at 70 cents a bushel, with a possibility that it might drop below that figure. From that point it began steadily to rise, and in November last reached as high as 96½ cents a bushel. It has not since fallen back to within 12 or 15 cents of the level from which it started. During all this period there has been no shipping market for wheat, no foreign demand to increase the price, and shipments from Chicago to Liverpool could not be made at a profit. From these facts it is evident that the vicissitudes of the Chicago wheat market are no longer regulated by those of the Liverpool market.

What mysterious influence it is that keeps the wheat market higher relatively in Chicago than it is in Liverpool, speculators and experts in economic science may discover if they can. It is evident that something beside speculative manipulation, the influence of corners and the effect of long or short sales is supporting prices—not at a high elevation, but on a level above points of low depression, and at a figure at which the farmer can

raise wheat and get it to market at a profit.—*Evening Journal.*

A FREE-TRADER'S SCREED.

In order to show how rapid India is increasing her hold upon the European wheat markets, let me call attention to the figures at foot, made up in England on the 28th of January last, and giving the amount of wheat and flour afloat for England, and whence shipped. The figures are compared with those of the corresponding figures for the preceding year. No flour is as yet shipped from India, and American exports of flour are estimated as wheat. It will be seen that the amount of wheat afloat from India on the 28th of January, 1886, was 4,068,000 bushels against 640,000 bushels at the corresponding period in 1885, while the amount afloat from the United States (Atlantic and Pacific ports) was on the 28th of January, 1886, 11,000,000 bushels, against—for same period in 1885—16,824,000 bushels. There is thus a decrease in the amount afloat from the United States of 3,428,000 bushels, and a gain in the amount afloat from India of 3,328,000 bushels shown in the comparison of this year with last. In other words, what we have lost in our ability to supply, India has gained. How long before our wheat growers will ask for a decrease of taxes?

The amount of wheat and flour afloat for Europe and whence shipped are as follows:

	1885. Jan'y 28th. Bushels.	1885. Jan'y 29th. Bushels.
Azore and Black Sea.....	460,000	228,000
Danube.....	48,000
Atlantic Ports, U. S.....	864,000	2,648,000
Atlantic Ports, U. S.....	10,216,000	14,176,000
India.....	4,068,000	648,000
Argentine Republic.....	28,000
Chile.....	272,000	160,000
Australia.....	136,000	762,000
Other countries.....	184,000
Total.....	16,228,000	18,692,000

—*The Million, Des Moines, Iowa.*

THE HOPPER SCALE SYSTEM IN CINCINNATI.

Some of our grain merchants have been making efforts to have the hopper scale system inaugurated in Cincinnati, for weighing car lots of grain on track, and Mr. Richards, the owner of the patent, has made a visit here to clearly demonstrate what his methods imply. Nothing could be more simple or more reliable in results, and it is to be hoped that the movement will receive sufficient encouragement to have a hopper scale house erected, at an eligible point for the railways entering the city from the west and south.

This system has been in operation on the Lake Shore & Michigan Southern Railway at Chicago for about two years, and has received the approval and indorsement of the Chicago Grain Receivers' Association.

Car loads of grain are brought alongside the scale house, and are quickly emptied, by a system of steam shovels, into a pit, when the grain is carried by elevators to a hopper bin, when the entire car load is weighed at one time—the practice being to have two clerks make a record, to avoid possible error. The grain is then returned to the same or another car, by gravity, and quickly.

This system facilitates business, by giving reliable and prompt weights, and it is proposed that it shall be done at no increase of cost over the present method, one dollar a car.

Our grain trade has suffered materially as a result of the track weighing system, causing delays and losses in weight from various causes, uncertainties to shippers as to what they may realize, etc. When the shipper can have assurance that he will be served with strictly correct weights of his grain, he can operate with confidence. When our market can give this guarantee, it will strengthen its attractions and claims for consignments.—*Cincinnati Price Current.*

THE SHORTAGES AT BUFFALO.

No one to-day can deny the need of an association of this nature, (Lake Carriers' Association), a congress of marine men, as it were, and no one can fail to outline the good effects it may have on the prosperity of lake carriers. The one question of grain shortage and shoveling is a sufficient argument for organization. Heretofore a vessel master dare not sue for recovery of moneys deducted from his freight bill for the reason that he would be blacked by the elevator people. If an association of this nature take the matter up it immediately assumes a different phase. To put the evil of shortage in a proper light, we print the following table, taken from the report of the Merchants' Exchange weighmaster:

	Bushels.	Short.	Over.
Wheat.....	17,046,800	12,046	5,780
Corn.....	15,872,000	5,210	6,173
Oats.....	554,600	612	28
Rye.....	234,600	157	21
Barley.....	160,200	103	75
Flaxseed as set.....	2,140,500	505	105
Note—Flaxseed per manifest.....	2,141,054	2,293	1,864

—*Marine Record.*

Fires, Casualties, Etc.

Five men have been arrested at Sanborn, Dak., for stealing wheat from the Northern Pacific Elevator.

D. Furrer's grain elevator, located at Easton, Ill., burned March 5. Loss, \$46,000; insured for \$25,000.

Jaqua & Co., dealers in hay, grain and cow feed, at Austin, Tex., had their stock ruined by fire on March 2.

Cargill Bros.' warehouse at Houston, Minn., containing about 1,000 bushels of wheat, was totally consumed by fire on March 2.

On March 8, the Iowa Elevator at Peoria, Ill., had a narrow escape from catching fire from an adjoining building which burned.

The boiler in the Minneapolis & Northern Elevator at Hamilton, Dak., exploded on Feb. 22, demolishing the boiler room. No one was hurt.

The elevator of the Wabasha, Minn., Roller Mills' new mill recently gave way under the weight of wheat, necessitating a stoppage of the mill.

Watson & Co. and Chas. Irwin, both grain dealing firms at Pittsburg, Pa., sustained considerable damage from a fire which consumed an adjoining building on Feb. 22.

G. W. Helm, at one time a grain merchant of Danville, Ill., was arrested near Longmont, Col., charged with forging his brother's name to a check for \$2,500 three years ago.

The Fresno Brewery, at Fresno, Cal., was destroyed by fire Feb. 20, together with its contents. Loss about \$5,000; insured for \$2,509. The fire was attributed to incendiarism.

The brewery at Jamestown, Dak., owned by Gesal & Kuhlertz, burned to the ground on Feb. 25. The loss was estimated at over \$10,000; insured for \$7,000. The brewery will be rebuilt at once.

A grain warehouse near Elizabeth, Minn., has been totally destroyed by fire. The loss on the building was about \$800; insured for \$600. The grain consumed with the warehouse was worth about \$900.

Eugene Conway, a boy of thirteen, was smothered on Feb. 20 in M. Laville's elevator at Atchison, Kan., while playing about the place. He went up to the corn bin, where it was supposed he slipped into the hopper and was drawn down.

The grain warehouse at Texas, Pa., owned by W. H. Gross, burned to the ground on Feb. 18. Loss, about \$1,800. The fire was thought to have originated from spontaneous combustion of a lot of damp bran, which had been scattered on the floor to dry.

A fire which originated in the basement of John A. Wichman's brewery, at Marine, Minn., destroyed it, together with the residence of the proprietor, on Feb. 25. The building was not worth more than \$3,000; not insured. The stock and machinery was also destroyed by the fire.

G. Kraacke, an extensive grain dealer of Davenport, Iowa, was shot through the nose March 6 by John Wohlenberg, a former partner. Mr. Kraacke's son, a youth of twenty, pounded Wohlenberg on the head with a paper weight, breaking his skull and inflicting injuries from which he will probably die. The trouble was caused by a dispute over a twenty-dollar note.

A serious accident occurred at the elevator of Gruenen, Felder & Hardtlieb, Pierron, Ill., on Feb. 26. While they were shelling corn excessive speed of the engine caused the belting to break and the bursting of the cylinder. Valentine Hardtlieb, a laborer, who was seated behind the cylinder, was seriously injured by some of the flying pieces from the bursting cylinder.

William Hogan had a narrow escape from death March 10. He was engaged in shoveling corn into the sheller at the Kansas Central Elevator, Leavenworth, Kan., when he was taken in a fit and pitched headlong into the hopper. Some of the hands who noticed him fall threw the machinery out of gear immediately and rescued him just in time to prevent him being crushed into a shapeless mass. The only injury he received was a couple of wounds in the scalp which were not considered dangerous.

STORAGE CHARGES ON GRAIN.

The following shows the storage cost per bushel for carrying grain into May, or for delivery on sales for May, on May 1, on receipts dated Feb. 5 and following, and for the various dates intervening previous to April 26:

February 5 to 14, inclusive, to carry into May	4 c
Feb. 15 to 24, " " "	3½ c
Feb. 25 to March 6, " " "	3 c
March 7 to March 16, " " "	2½ c
March 17 to March 26, " " "	2 c
March 27 to April 5, " " "	1½ c
April 6 to April 15, " " "	1 c
April 16 to April 25, " " "	½ c
April 26 and later, " " "	Free

About 75,000 bushels of wheat a day has of late been marketed in Minnesota and Dakota.

CONDITION OF THE WINTER WHEAT.

One-third of the crop was sown late, owing to fear of Hessian fly. This proportion of the crop has suffered more or less from winter killing during the last thirty days. The acreage of 1886 is from 8 to 10 per cent. below the acreage of 1885. This reduction was caused by the scarcity and high price of good seed wheat at seeding time, and also the general discouraging outlook for the wheat grower. The states of Illinois, Kansas, and Missouri show the largest decrease in acreage. The acreage of Indiana, Ohio, and Michigan is practically the same as the acreage of the preceding year. Kentucky and Tennessee show a reduction of about 9 per cent. The wheat which has been protected during the whole winter by snow is confined only to limited areas in different states, and at no time since the winter wheat crop was sown in 1885 has the winter wheat belt as a whole been protected for a period of time over twenty days. On the whole the weather for February was trying upon the wheat crop, and the month of March, up to this date, has shown little if any improvement. North of the Ohio River the winter wheat has made scarcely any growth as yet, and the crop is backward. As a class farmers are inclined to hold the reserves of wheat only where crop prospects are not encouraging. The 1885 crop has been pretty well cleaned up, but there seems still to be considerable of the 1884 wheat on hand. The conclusions arrived at are substantially these: Prospects are fair for an average crop with favorable weather during the next thirty days, but no indications of a full or excessive crop. The most encouraging outlook for wheat comes from the Pacific slope. The condition and acreage are found to be as follows:

Illinois—The reports cover Central and Southern Illinois, where practically the entire winter wheat crop of the state is grown. The decrease in acreage for that area is 15 per cent. less than the area sown in 1885. The reports average fair, with more or less damage to late sown wheat in exposed places. The most trying weather so far on the crop has been the month of March. Wheat has made but little growth.

Kansas—There is no uniformity whatever in the reports in the state. In many portions of Kansas wheat is badly damaged now, caused by poor seed, late seeding, Hessian fly, and the trying weather in February and March. A very conservative estimate for the year 1886 under existing conditions would be 75 per cent of an average crop. The acreage is decreased 5 per cent.

Missouri—As a whole, winter wheat was generally sown late. There is some fly in early sown, especially on stubble ground. The last fourteen days of February were very severe on wheat, and thinned it out in many exposed fields. The first week in March the ground was covered with snow, which was favorable. Missouri ought to produce, putting the question of acreage aside, an average crop this season. The reduction in acreage is 8 per cent.

Michigan—No state in the winter wheat belt at the present time seems to be so much off color as Michigan. For the last three weeks the weather has been very trying and damaging to the crop. The general conditions are not favorable by any means to-day for a full crop. The wheat was sown late, made a small growth before winter, and was infected in the fall more or less by the Hessian fly. The acreage is the same as that of 1885.

Ohio—Considering the open winter, the thawing and freezing weather in March, and the absence of snow, wheat has come through the winter fairly well—better than last winter at this time—but nothing to indicate more than an average crop. The acreage is the same as that sown in 1885.

Tennessee and Kentucky—The wheat crop of these two states is just beginning to green up. They have come through the winter remarkably well. The snow fall has been of a greater depth south of the Ohio River than north of it. The decrease in acreage for Kentucky is 6 per cent, and for Tennessee 12.

California—From reports from nearly every county in the state the present prospect is as good as ever known. A portion of the early sown will probably lodge, owing to its rank growth, but the present prospects are that the yield will be 20 per cent. more than the former season. The prospect for a heavy yield in the southern portion of the state is better, as compared with the northern portion. The seeding has just ended, and the ground is moist and warm, having been refreshed by general showers.

Oregon—February has been a very propitious month for seeding. The winter has been very favorable to the crop. There is a good stand. Farmers feel almost assured of an excellent yield at harvest. Spring seeding is being pushed rapidly, and more spring wheat will be sown than last season.

Washington Territory—A similar situation exists in Washington territory. The prospects for winter wheat are very fine. The crop of 1886 for Eastern Oregon and Washington territory is estimated at 14,000,000 bushels. The demand for barley being so great the acreage has been largely increased the present season.

Natural gas has been discovered at Carey, Ohio, at a depth of 1,400 feet, which will yield about 200,000 feet daily. Two more wells will be dug to furnish fuel for the elevator and grist mill of David Straw.

The Brown county Farmers' Alliance will put in public scales at Columbia, Dak., the council of that city having refused to put them in. The Alliance is also talking of building an elevator at that place.

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Machinery for a ship elevator (with yoke in good order), including one Fairbanks' Scale, 150 bushels' capacity, and one hopper scale, 100 bushels' capacity. This machinery is all in good order, and will be sold cheap at a bargain. Address

M. J. WALLACE, 705 Broadway, Albany, N. Y.

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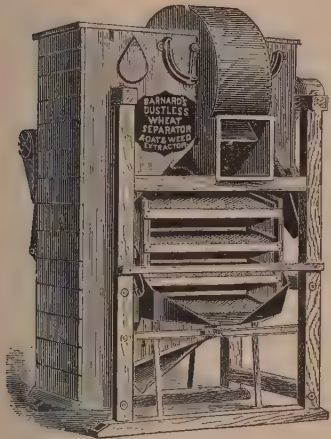
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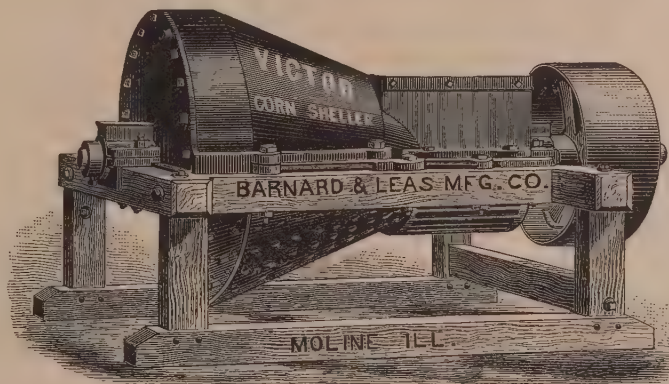
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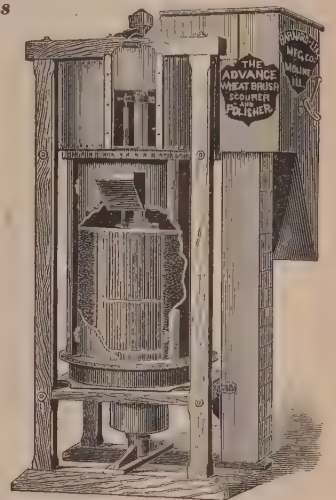
Yours truly, **J. M. DAVIDSON.**



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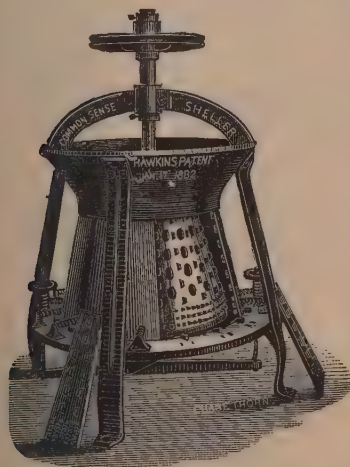


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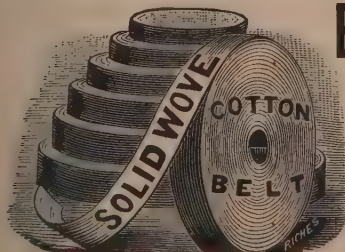
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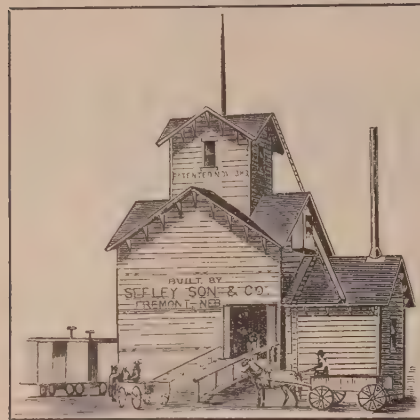
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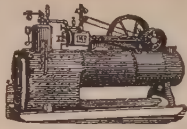
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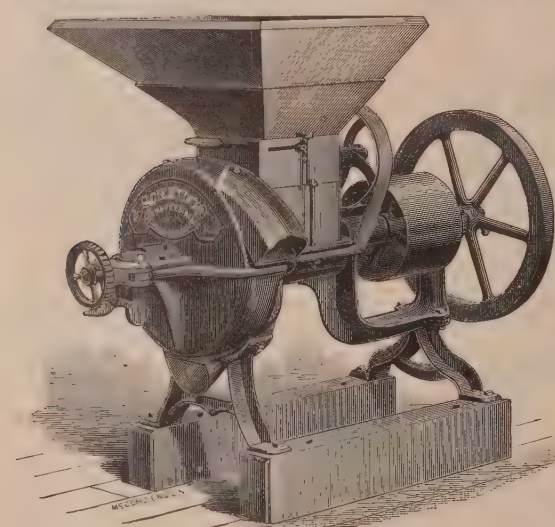


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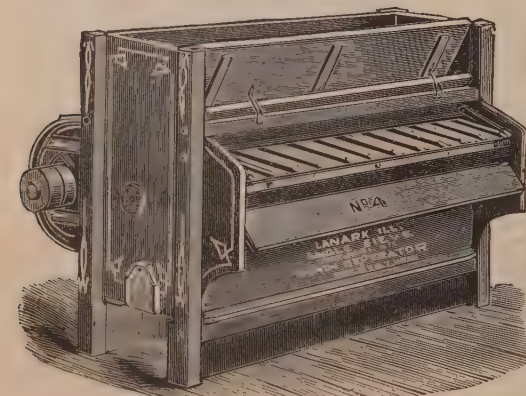
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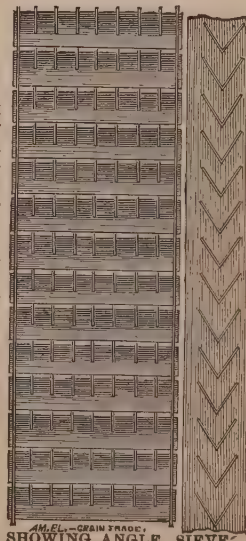
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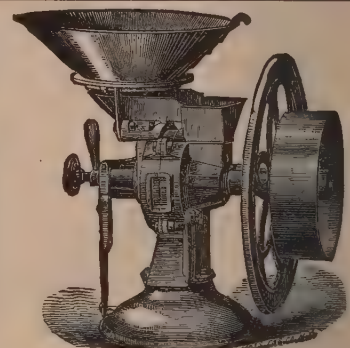
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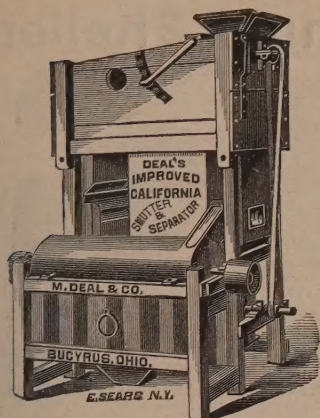
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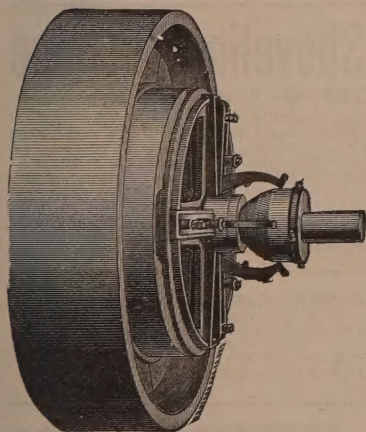
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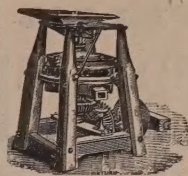
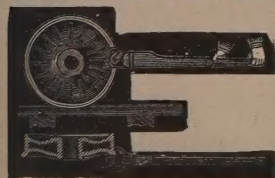
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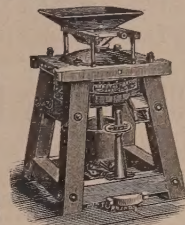
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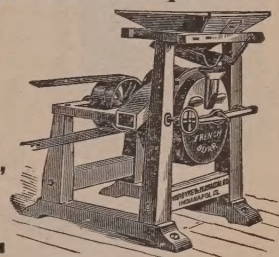
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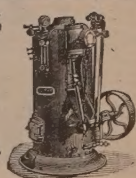
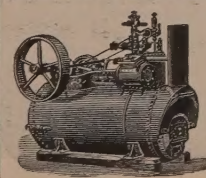
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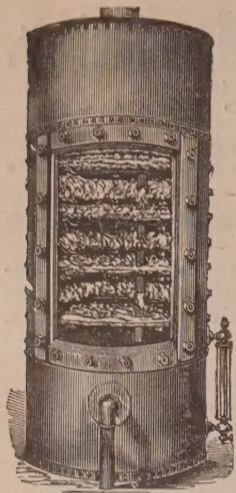
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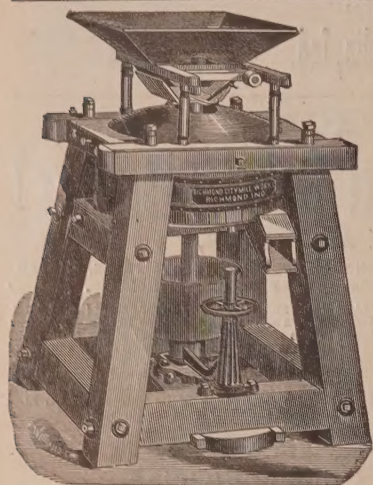
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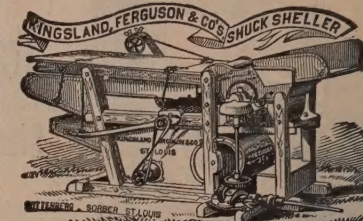
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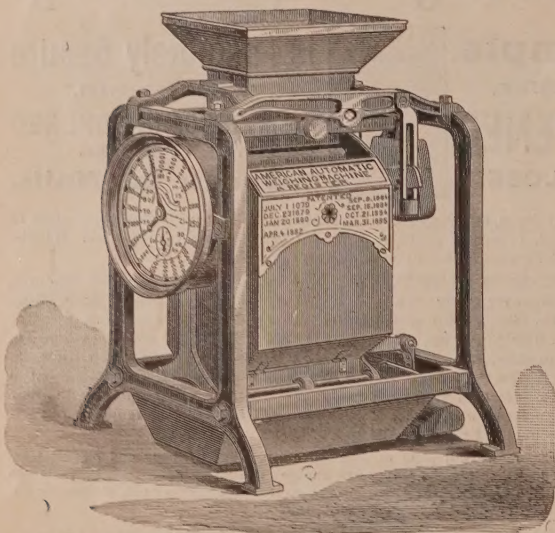
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To Whom it May Interest: I placed in my city mills, last fall, one of S. E. Worrell's No. 2 Combined Drying and Cooling Machines, which works to my entire satisfaction. I have dried all the corn which I worked into meal and hominy. I have also used the Drier on wheat with very satisfactory results. Recently I took a load of wheat that had laid in the bottom of the river, under twenty feet of water, two hours, becoming, of course, thoroughly soaked; I put it twice through the Drier, and fully restored it to its former value in the estimation of mill owners, who took it at market price.

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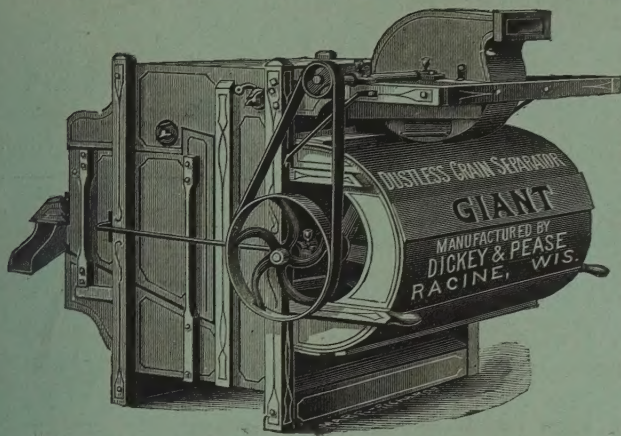


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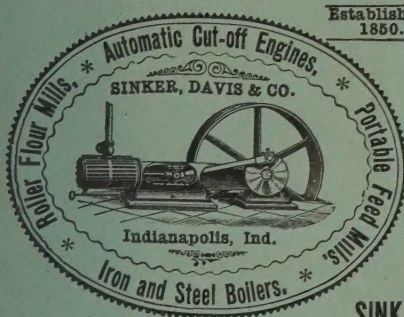
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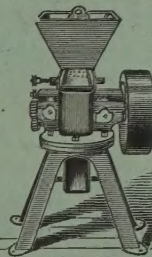
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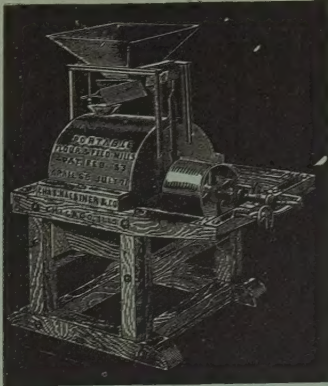
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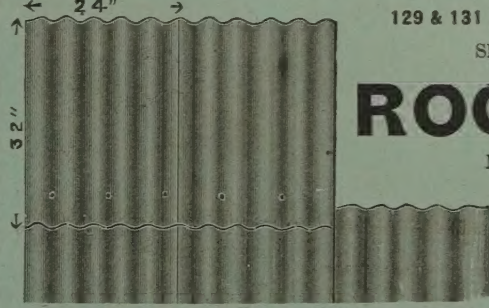
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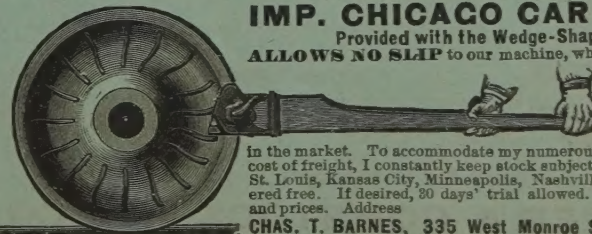
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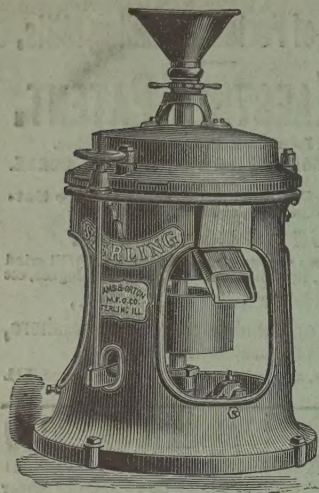
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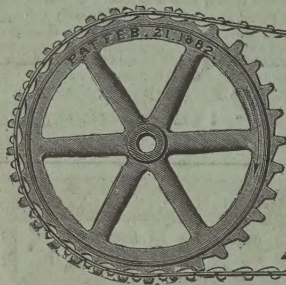
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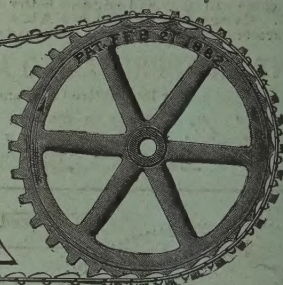
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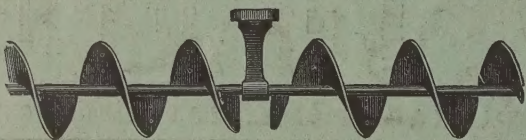
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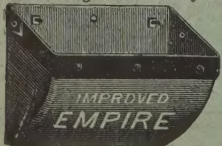
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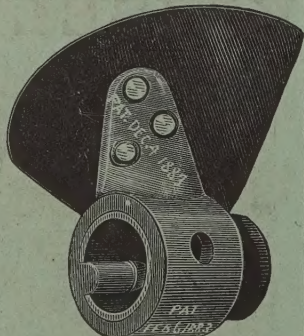
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